



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***



AUTO SAFETY HOTLINE
(800) 424-9393
Wash. D.C. Area 366-0123

DYNAMIC SCIENCE, INC.
In-Depth Accident Investigation

Contract Number DTNH22-93-P-07484
Case Number DSI-93-AB-016

 1993

TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.
CONTRACT NUMBER: DTNH22-93-P-07484
CASE NUMBER: DSI-93-AB-016

[REDACTED]

This two vehicle collision occurred on [REDACTED] 1992, a winter weekday, on an entrance ramp to an expressway in [REDACTED] New Jersey. The initial impact occurred when Vehicle 1 struck the rear end of Vehicle 2 with its front end. The second impact occurred with Vehicle 1 striking a guard rail on the right side of the ramp.

Vehicle 1, 1990 Lincoln Town Car Signature, was being driven northbound on the entrance ramp. The driver was a 61 year old female (case occupant) who was restrained by a lap and shoulder restraint. Vehicle 1 was traveling at a speed estimated to have been between 24 and 32 KPH (15 and 20 MPH).

Vehicle 2, 1983 Buick Regal Limited, was being driven northbound on the entrance ramp. Vehicle 2's travel speed is unknown because there was no inspection of Vehicle 2.

The initial impact between the two vehicles occurred as both vehicles were on the ramp to travel northbound on the expressway. The 1st impact occurred when the driver of Vehicle 1 lost control of her vehicle and Vehicle 1 struck the rear end of Vehicle 2. Vehicle 1 continued to move to the right side of the ramp and impacted a guard rail with the same general area that was damaged by the 1st impact. This type of damage is called masked damage and is treated as one impact when this damage is assigned a CDC or when developing up an estimated Delta V.

The Delta V for Vehicle 1 was computed as 18 KPH (11 MPH). Vehicle 1 was assigned a CDC of 12FZEW1 from photographs. The Delta V was derived by using the CDC extent zone for the crush profile and the impact with the guard rail (fixed object). This is borderline reconstruction because of the multiple impacts and using only a CDC for the crush profile.

The driver of Vehicle 1 (case occupant) sustained major burns to her face which equal an AIS of 3. The injury appears to have occurred when the supplemental restraint system deployed, from the collision with Vehicle 2. The driver was transported to an area hospital where she was treated and released.

The right front occupant reportedly sustained minor injury to an eye (contusion or abrasion) and the severity is unknown. The R/F occupant was transported to an area hospital where he was treated and released.

The driver and R/F occupant of Vehicle 2 reportedly sustained no injuries resulting from the collision.

Vehicle 1 was towed from the scene due to the injuries of the driver. Vehicle 2 was driven from the scene.

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The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Traffic Safety Administration.

The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

DYNAMIC SCIENCE, INC.
ACCIDENT INVESTIGATION
CASE NUMBER: DSI-93-AB-016

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- A. Medical records
- B. NASS Field Forms
- C. Police Accident Report

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Case Number: DSI-93-AB-016

ACCIDENT DATA:

Location: [REDACTED], New Jersey
Area/Type: Urban/Commercial
Date/Time: Winter/Weekday
Accident Type: Car/Car, Car/Guard Rail

INJURY SEVERITY:

Vehicle 1: Driver, AIS-3
R/F Occupant, Reportedly sustained
incapacitating injuries
Vehicle 2: Driver, No injuries
R/F Occupant, No injuries

AMBIENCE:

Viewing Conditions: No viewing restriction
Cloud Cover: Clear
Precipitation: Clear
Temperature: Unknown
Road Surface: Wet

**Dynamic Science, Inc.
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ROADWAY:

	VEHICLE 1	VEHICLE 2
Type:	Entrance ramp to a northbound parkway, channelized	Entrance ramp to a northbound parkway, channelized
Width:	Not inspected	Not inspected
Traffic Density:	Reportedly moderate	Reportedly moderate
Median:	None	None
Edge:	Right side was a guard rail	Unknown
Surface:	Reportedly Asphalt	Reportedly Asphalt
Reported Defects:	None reported	None reported
Co-efficient of Friction (est.):	Unknown, Wet surface	Unknown, Wet surface
Vertical Alignment:	Reportedly level	Reportedly level
Horizontal Alignment:	Reportedly straight	Reportedly straight

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In-Depth Investigation
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Traffic Controls:

	VEHICLE 1	VEHICLE 2
Signals:	None	None
Signs:	None	Yield sign
Speed Limit:	72 KPH (45 MPH)	72 KPH (45 MPH)
Markings:	Scene not inspected	Scene not inspected

**Dynamic Science, Inc.
In-Depth Investigation
Case Number: DSI-93-AB-016**

VEHICLES:

	VEHICLE 1	VEHICLE 2
Description:	1990 Lincoln Town Car Signature 4-door	1983 Buick Regal Limited 2-door
Odometer:	19,312 km (12,000 mi) Estimated by owner	Unknown (not inspected)
Engine:	5.0 L / V8	3.8 L / V6
Vehicle Modifications:	None	Unknown (not inspected)
Tire Condition:	Unknown at the time of collision	Unknown (not inspected)
Manual Restraints:	3-point lap and shoulder belts at the front seating positions and the left and right rear seating positions; 2-point lap belt at the center rear seating position	Unknown (not inspected)
Automatic Restraints:	Driver and passenger side supplemental restraint systems (airbags)	None per V.I.N.
Reported Defects:	None	Unknown (not inspected)
Cargo:	None	Unknown (not inspected)
Windshield Damage:	None	Unknown (not inspected)
Fleet:	None	None
Tow Status:	Towed due to driver's injuries	Driven from the scene

**Dynamic Science, Inc.
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VEHICLE DAMAGE:

	VEHICLE 1	VEHICLE 1
Object Struck:	Vehicle 2	Guard Rail (fixed object)
Event Number:	01	02
CDC:	N/A Masked damage	12FZEW1 (by photographs)
Maximum Crush:	Zone 1	Zone 1 (by photographs)

VEHICLE VELOCITY ESTIMATES:

	VEHICLE 1	VEHICLE 1
Impact Speed:	24 - 32 KPH (15 - 20 MPH)	16 - 24 KPH (10 - 15 MPH)
Total Delta V:	Not computed, the collision damage was masked by another impact with a fixed object (guard rail)	18 KPH (11 MPH)
Longitudinal Delta V:		-18 KPH (-11 MPH)
Lateral Delta V:		-3 KPH (- 2 MPH)
Energy Dissipation:		24178.4 joules (17830.7 ft/lbs)
Calculations based upon:	None	CRASH III PC - multiple impacts - borderline reconstruction - used vehicle vs. barrier with CDC only

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VEHICLE DAMAGE (con't):

	VEHICLE 2
Object Struck:	Vehicle 1
Event Number:	01
CDC:	Not inspected
Maximum Crush:	Not inspected

VEHICLE VELOCITY ESTIMATES:

	VEHICLE 2
Impact Speed:	Unknown
Total Delta V:	Not computed, masked damage on Vehicle 1 and this vehicle was not inspected
Longitudinal Delta V:	Unknown
Lateral Delta V:	Unknown
Energy Dissipation:	Unknown
Calculations based upon:	None

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In-Depth Investigation
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COLLISION SEQUENCE:

PRE-CRASH: This two vehicle collision occurred on a winter weekday, on an entrance ramp to an expressway in ██████████ New Jersey. The initial impact occurred when Vehicle 1 struck the rear end of Vehicle 2 with its front end (right half). The second impact occurred with Vehicle 1's right front corner striking a guard rail on the right side of the ramp.

Vehicle 1, 1990 Lincoln Town Car Signature, was being driven northbound on the entrance ramp. Vehicle 1 entered the ramp from an eastbound roadway. The driver was a 61 year old female (case occupant) who was restrained by the available 3-point manual lap and shoulder restraint. In the vehicle's right front seating position was a 29 year old male. The R/F occupant was reportedly restrained by the available 3-point manual lap and shoulder restraint. Vehicle 1 also has a driver and passenger side Supplemental Restraint System (SRS) available in the vehicle. Vehicle 1 was traveling at a speed estimated to have been between 24 and 32 kilometers per hour (15 and 20 MPH).

Vehicle 2, 1983 Buick Regal Limited, was being driven northbound on the entrance ramp. Vehicle 2 entered into a channelized lane of the ramp from a westbound roadway. The travel speed of Vehicle 2 is unknown because there was no inspection of Vehicle 2.

The initial impact between the two vehicles occurred as both vehicles were on the ramp to travel northbound on the expressway. Vehicle 2 was merging into a through travel lane of the ramp in front of Vehicle 1 at the time of the collision. The 1st impact occurred when the driver of Vehicle 1 lost control of her vehicle and Vehicle 1 struck the rear end of Vehicle 2. Vehicle 1 continued to move to the right side of the ramp and impacted a guard rail with the same general area of the frontal plane that was damaged by the 1st impact. This type of damage is called masked damage and is treated as one impact when this damage is assigned a CDC or when developing an estimated Delta V.

CRASH: The estimated Delta V for Vehicle 1 was computed using CRASH III PC (fixed barrier algorithm), as 18 kilometers per hour (11 MPH). Vehicle 1 was assigned a Collision Deformation Classification (CDC) of

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12FZEW1 from the available photographs. The Delta V was calculated by using the CDC extent zone for the crush profile and the impact with the guard rail (fixed object). This is borderline reconstruction because of the multiple impacts and using only a CDC for the crush profile.

POST CRASH: Vehicle 1 reportedly came to a final rest position against the guard rail on the right side of the ramp. Vehicle 2's final rest position is unknown.

DRIVER KINEMATICS:

The 61 year old female driver of Vehicle 1 (case occupant) was seated in an upright seated position with the seat adjusted forward of center because of her short stature. The driver was restrained by the available manual 3-point lap and shoulder restraint. The case occupant is 155 centimeters (61 in) in height and her weight was unavailable. At impact, the case occupant continued forward toward the principle direction of force of the impact. The impact with Vehicle 2 deployed the supplemental restraint system (the driver side air bag). The deployment of the air bag appears to have been restricted by the driver's seating position and her forward movement at impact. This did not allow the air bag to deploy properly and the nitrogen gas that inflates the bag was forced out the vent holes located in the rear of the bag at approximately the eleven and five o'clock positions. This occurrence resulted in the case occupant receiving burns on her face and right wrist. The medical report states that the burns can be attributed to chemical contact.

The driver also received injuries to her right eye. The eye injury probably occurred when she contacted the steering wheel and the lens from the glasses that she was wearing broke out of the frame and injured her eye.

AIRBAG SYSTEM:

The case vehicle, a 1990 Lincoln Town Car Signature, was equipped with Supplemental Restraint Systems (driver and passenger side air bags). The SRS deployed as a result of a frontal impact with the rear end of a 1983 Buick Regal Limited.

An inspection was conducted by Dynamic Science approximately ten months after the collision occurred. The driver air bag was found to be intact and there was no damage to the bag. The SRS was vented by two ports located on the back side of the bag. The ports were located at 11

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o'clock and 5 o'clock positions. The air bag contained 7 vertical fold points and 4 horizontal fold points with reference to the top of the air bag. The air bag measured 63 centimeters (24.8 in) in diameter. The following sequence of numbers and letters were found on the driver side SRS:

(Re: photo #19 / air bag)

[REDACTED]

(Re: photos #24-27 / module)

[REDACTED]

(Re: photo #29-31 / sensors)

[REDACTED]

The passenger's side air bag was found intact and with no damage to the bag. The passenger's side SRS (air bag) measured 65 centimeters (25.6 in) across and 60 centimeters (23.6 in) in depth. The following sequence of numbers and letters were found on the passenger's side SRS:

(Re: photo #34 / air bag)

[REDACTED] (I is red in color)

(Re: photo #38 / module)

[REDACTED]

SCENE CLEARANCE:

The driver of Vehicle 1 (case occupant) sustained major burns to her face which equal to AIS-3. The injury appears to have occurred when the supplemental restraint system deployed, from the collision with Vehicle 2. The driver was transported to an area hospital where she was treated and released.

The right front occupant reportedly sustained a minor injury to an eye (contusion or abrasion) and the severity is unknown. The R/F occupant was transported to an area hospital where he was treated and released.

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The driver and R/F occupant of Vehicle 2 reportedly sustained no injuries as a result of the collision.

Vehicle 1 was towed from the scene due to the injuries of the driver. Vehicle 2 was driven from the scene.

SAFETY STANDARDS:

No violations of the Federal Motor Vehicle Safety Standards were found during vehicle inspection.

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DRIVER AND OTHER OCCUPANTS:

VEHICLE 1

	DRIVER	OCCUPANT 2
Age/Sex:	61 Yrs. / Female	29 Yrs. / Male
Seated Position:	Left Front	Right Front
Seat Type:	Split bench with separate back cushions	Split bench with separate back cushions
Height:	155 cm (61 in)	163 cm (64 in)
Weight:	Unavailable	53 kg (117 lbs)
Occupation:	Unknown	Unknown
Pre-existing Medical Condition:	None	Unknown
Alcohol/Drug Involvement:	None	N/A
Driving Experience:	45 years	N/A
Body Posture:	Upright normal posture	Upright normal posture
Hand Position:	Both on steering wheel	Unknown
Foot Position:	Unknown	Both on floor
Restraint Usage:	3-point manual lap and shoulder belt and a supplemental restraint system (air bag)	3-point manual lap and shoulder belt and a supplemental restraint system (air bag)
Additional Occupants:	One	None

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DRIVER AND OTHER OCCUPANTS (con't):

VEHICLE 2

	DRIVER	OCCUPANT 2
Age/Sex:	47 Yrs. / Female	68 Yrs. / Female
Seated Position:	Left Front	Left Front
Seat Type:	Unknown (not inspected)	Unknown (not inspected)
Height:	Unknown (no interview)	Unknown (no interview)
Weight:	Unknown	Unknown
Occupation:	Unknown	Unknown
Pre-existing Medical Condition:	Unknown	Unknown
Alcohol/Drug Involvement:	Unknown	Unknown
Driving Experience:	Unknown	N/A
Body Posture:	Unknown	Unknown
Hand Position:	Unknown	Unknown
Foot Position:	Unknown	Unknown
Restraint Usage:	Reportedly lap and shoulder belt	Reportedly lap and shoulder belt
Additional Occupants:	One	None

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INJURIES:

Vehicle 1

	INJURY	OIC	ICD-9	SOURCE
DRIVER	Extensive burns to the entire face (chemical burns); forehead, cheeks, eyelids and chin	292010.3,0	941.39	Air bag exhaust gases
	Large corneal abrasion on the right eye	240602.1,1	918.1	Steering wheel with lens of glasses contacting the eye
	Abrupt vitreous (gel of the eye) retractions with intermittent attacks of "flashes of light" which disturb the vision	241699.1	918.9	Steering wheel with lens of glasses contacting the eye
	Contusion, left side of neck	390402.1,2	920	Air bag
	Burn, right wrist	792006.1,1	944.07	Air bag exhaust gases
R/F OCCUPANT	Reportedly sustained incapacitating injuries to eye (contusion or abrasion) unknown severity			

Vehicle 2

DRIVER	Reportedly no injuries
R/F OCCUPANT	Reportedly no injuries

Abbreviations Used In Scene And Photographic Documentation

ft.	Feet
in.	Inches
AIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
COE	Cab Over Engine
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
I	Interstate Highway
IP	Intermediate Point
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
R	Radius of Curvature
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
T	Time or Elapsed Time (in seconds)
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound

COLLISION MEASUREMENTS

Case Number DSI-93-AB-016

Reference Point: N/A

Reference Line: N/A

DATA POINT	LONGITUDINALS	LATERALS
THE SCENE WAS NOT INSPECTED / REMOTE STYLE OF CASE		

PHOTO INDEX

Case No. DSI-93-AB-016

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1-7	V1	CW	Exterior views, Vehicle 1 (after repairs on vehicle)
8-15	V1	--	Interior views, Vehicle 1
16-28	V1	--	Supplemental Restraint System (SRS), Vehicle 1, driver side
29-31	V1	--	Supplemental Restraint System sensors, Vehicle 1
32-39	V1	--	Supplemental Restraint System (SRS), Vehicle 1, passenger side
40-42	V1	--	Exterior views, Vehicle 1 (damage from collision)
43-44	V1	--	Interior views, Vehicle 1, depicts SRS locations prior to repair
45-51	V1	--	Views of injuries of the driver of Vehicle 1 resulting from collision









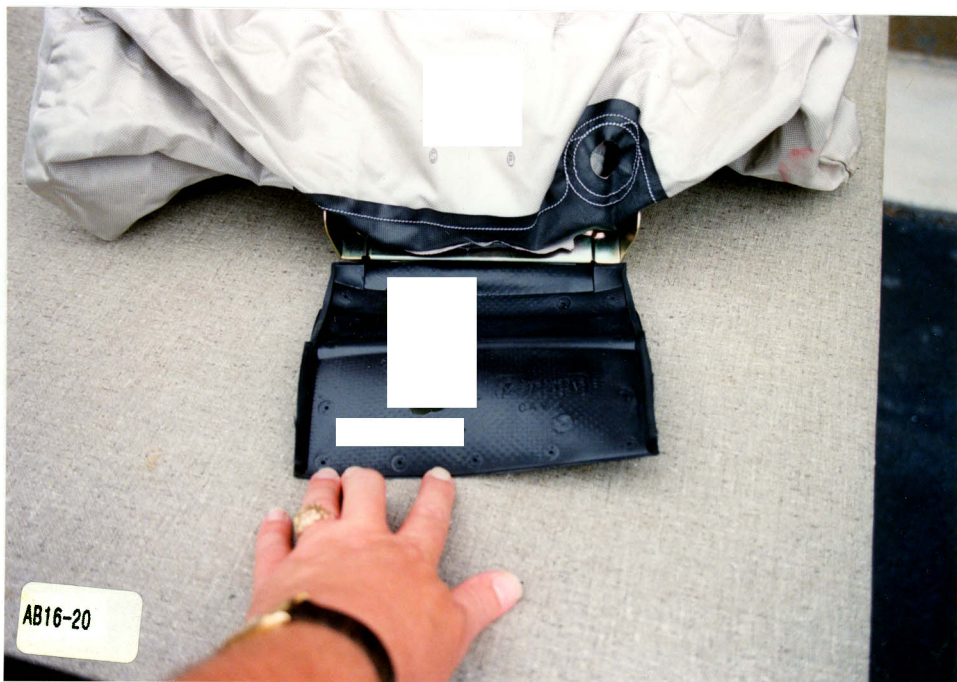






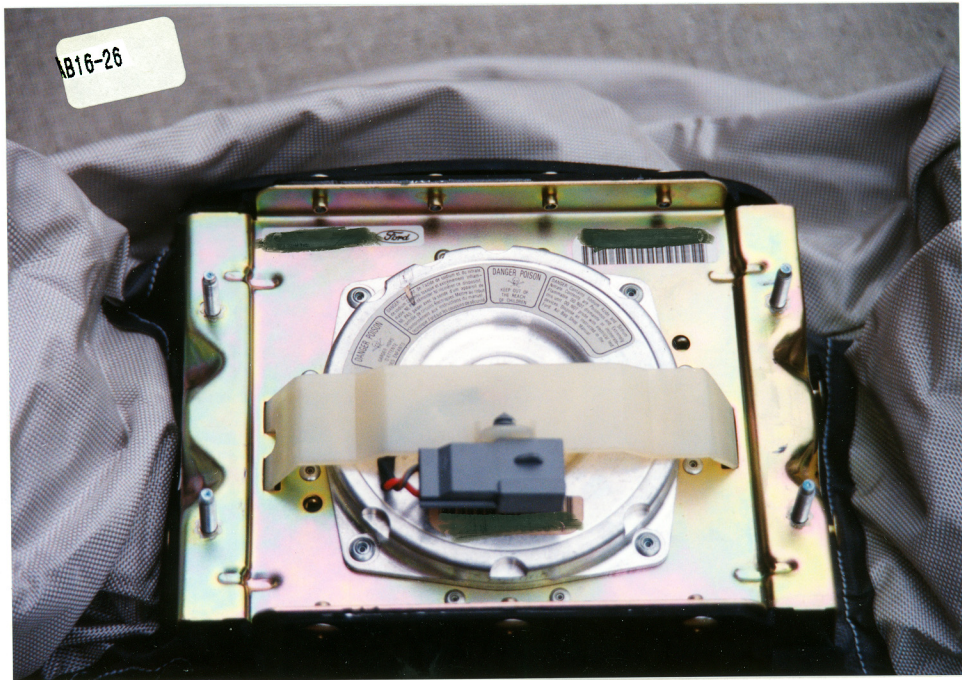
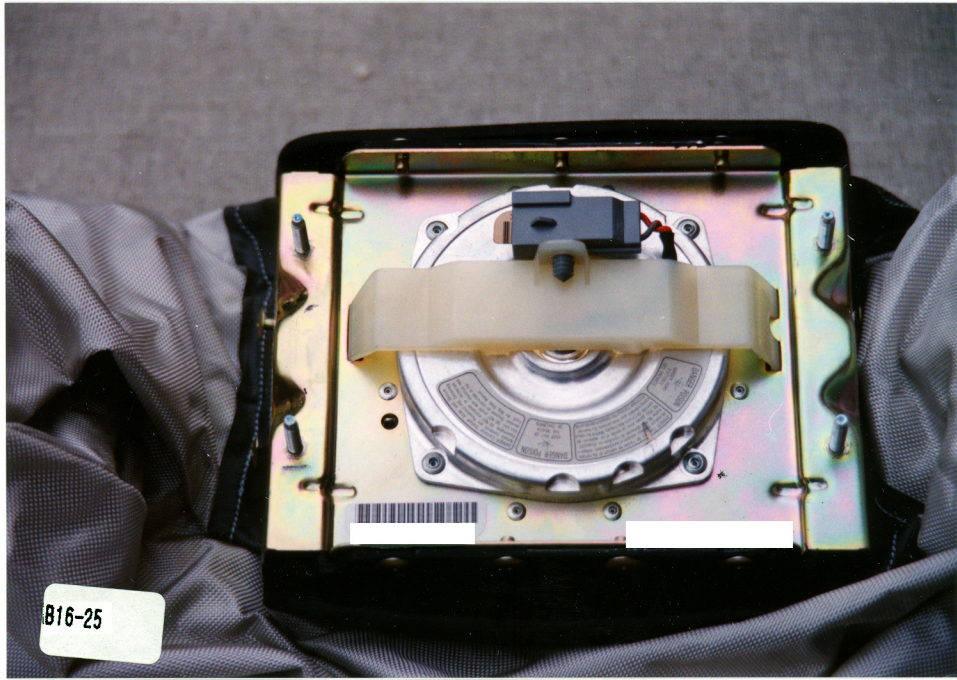


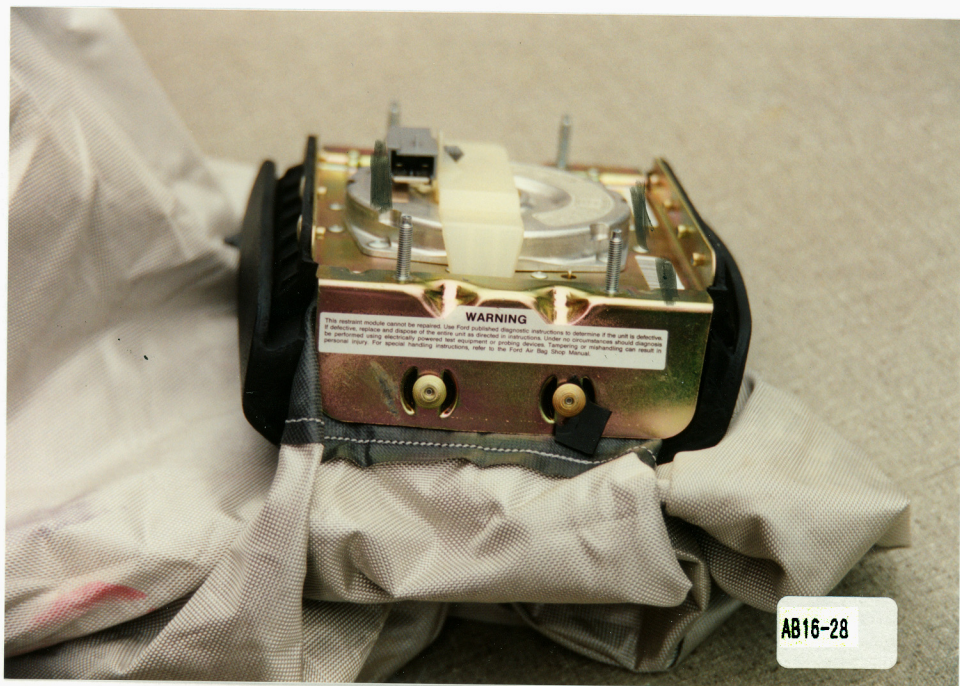
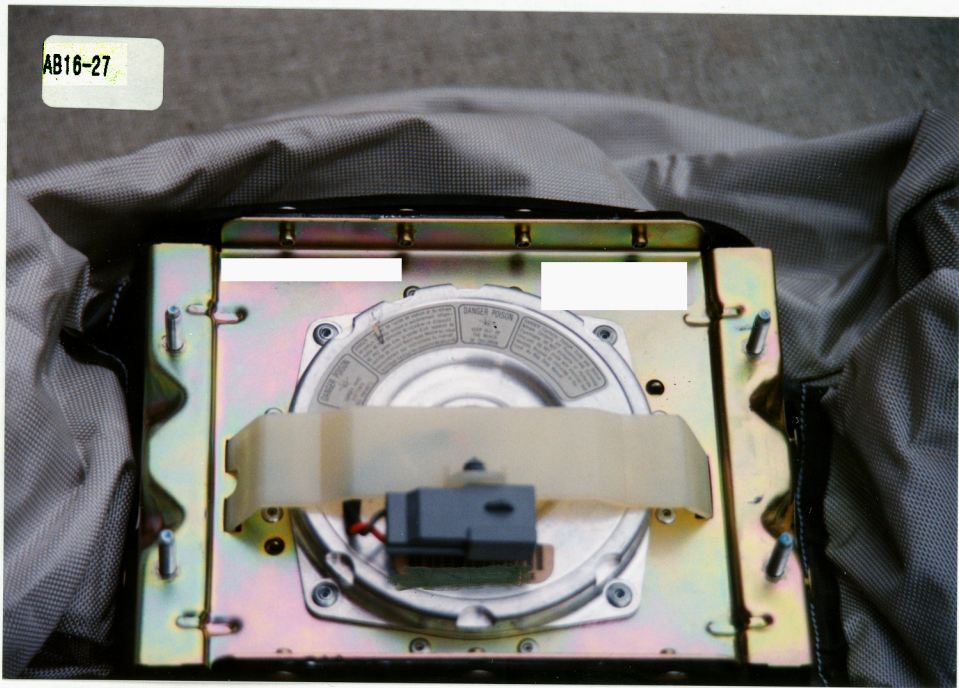


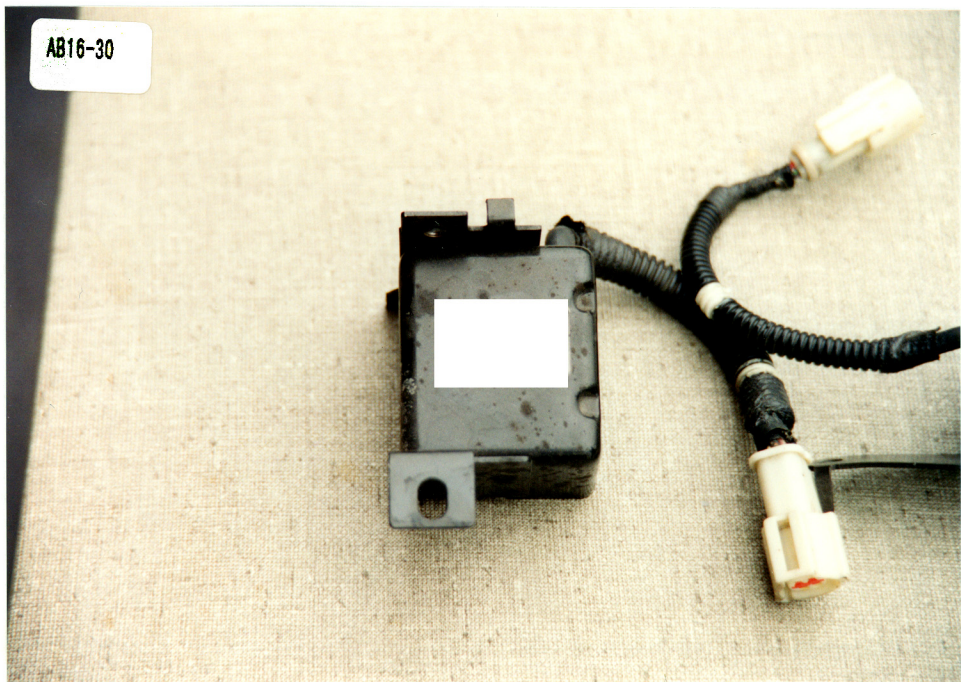
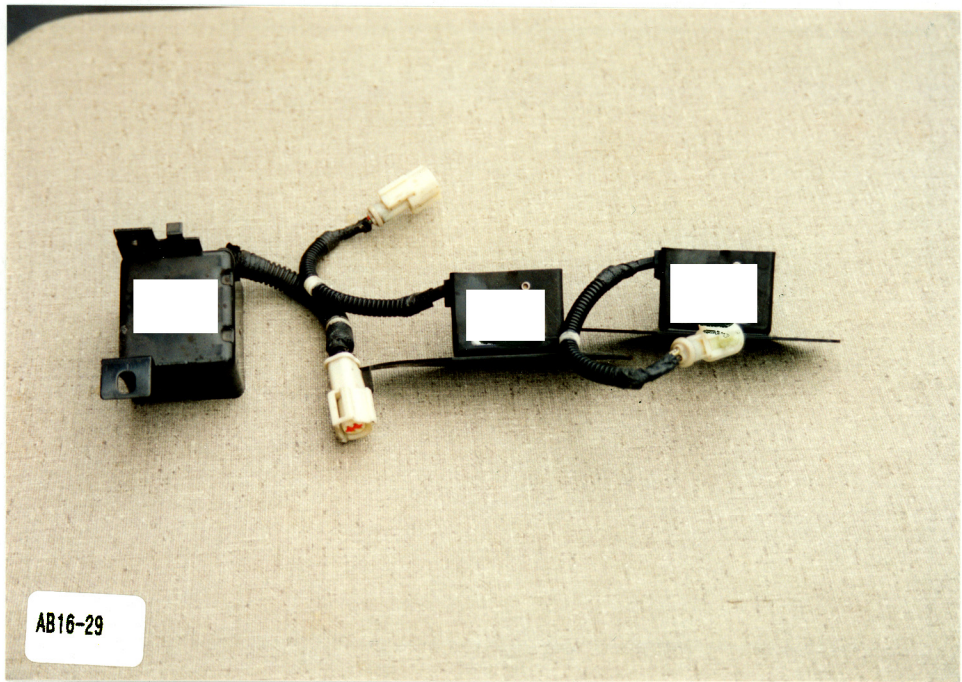


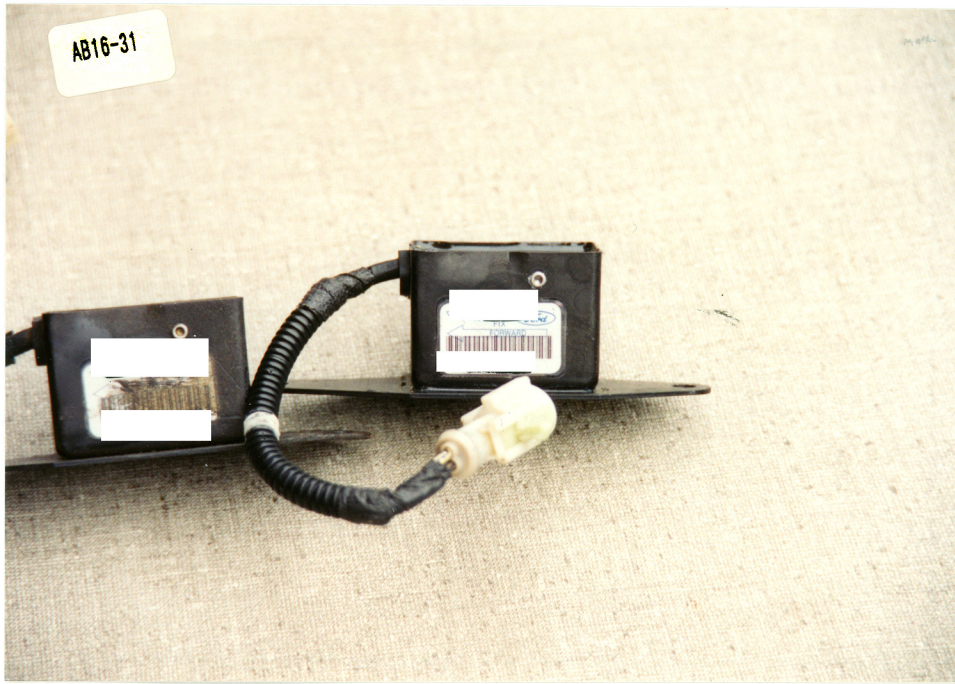








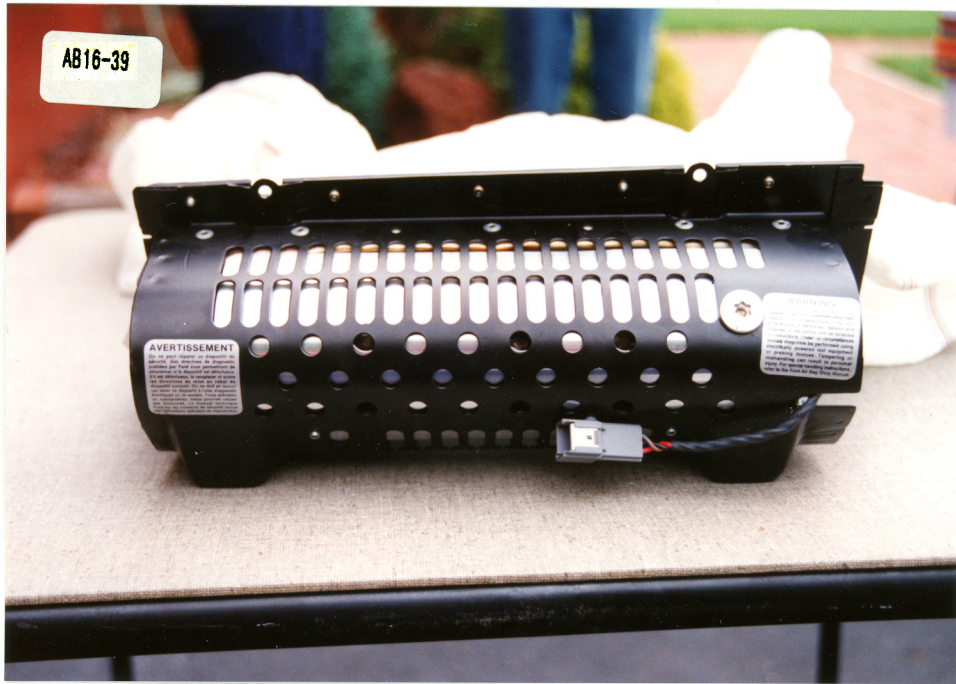
















“GRAPHIC” PHOTOGRAPHS AND IMAGES

The following “GRAPHIC” Photographs and Images have been removed from this case.

Photo # 45-51

If you would like a copy of these photographs and/or images please write to:

MARJORIE SACCOCCIO
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER
55 BROADWAY
CAMBRIDGE, MA 02142

In the body of your request please include the case, photograph and image number(s).



U.S. Department of Transportation
National Highway Traffic Safety
Administration

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____

2. Case Number - Stratum

DSI-93-AB-016**IDENTIFICATION**3. Number of General Vehicle
Forms Submitted014. Date of Accident
(Month,Day,Year)WINTER WEEKDAY 19 2

5. Time of Accident

AFTERNOON

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999**SPECIAL STUDIES - INDICATORS**

Check (✓) each special study (SS14-SS18 below)
that has been completed; code 1 for the checked
special studies and 0 for the special studies not
checked.

6. ____ SS14 Fatal AOPS

0

7. ____ SS15 Administrative Use

0

8. ____ SS16 _____

0

9. ____ SS17 _____

0

10. ____ SS18 _____

0**NUMBER OF EVENTS**11. Number of Recorded Events
in This Accident02Code the number of events which occurred
in this accident.**ACCIDENT EVENTS**

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other
involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>01</u>	13. <u>01</u>	14. <u>05</u>	15. <u>F</u>	16. <u>02</u>	17. <u>03</u>	18. <u>B</u>
19. <u>02</u>	20. <u>01</u>	21. <u>05</u>	22. <u>F</u>	23. <u>56</u>	24. <u>00</u>	25. <u>0</u>
26. <u>03</u>	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____
33. <u>04</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>05</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase \geq 254 but < 265 cm)
- (03) Intermediate (wheelbase \geq 265 but < 278 cm)
- (04) Full size (wheelbase \geq 278 but < 291 cm)
- (05) Largest (wheelbase \geq 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (\leq 4,500 kgs GVWR)
- (13) Passenger van (\leq 4,500 kgs GVWR)
- (14) Other van (\leq 4,500 kgs GVWR)
- (15) Pickup truck (\leq 4,500 kgs GVWR)
- (18) Other truck (\leq 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

CODES FOR GENERAL AREA OF DAMAGE (GAD)

CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

TDC APPLICABLE VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo
area (rear of trailer or
straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):

(35) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

- (41) Tree (\leq 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (\leq 10 cm in diameter)
- (51) Pole or post (> 10 cm but \leq 30 cm in
diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)
(specify): GUARDRAIL

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object



GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____
2. Case Number - Stratum DS1-93-AB-016
3. Vehicle Number 01

VEHICLE IDENTIFICATION

4. Vehicle Model Year 90
Code the last two digits of the model year
(99) Unknown
5. Vehicle Make (specify): 13
LINCOLN
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown
6. Vehicle Model (specify): 001
TOWN CAR / SIGNATURE
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown
7. Body Type 04
Note: Applicable codes may be found on
the back of this page.
8. Vehicle Identification Number
1 L N L M B 2 F S L Y X X X X X X
Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nine's

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown
10. Police Reported Travel Speed 999
Code to the nearest kph (NOTE: 000 means
less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown
____ mph X 1.6093 = ____ kph

11. Police Reported Alcohol Presence 0
(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) Unknown

Note: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver 96
Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: PAR

ACCIDENT RELATED

13. Speed Limit 072
(000) No statutory limit
Code posted or statutory speed limit
in kph
(999) Unknown
45 mph X 1.6093 = 072 kph
14. Attempted Avoidance Maneuver 01
(00) No impact
(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):
(99) Unknown
15. Accident Type 24
Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):
(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

BEST AVAILABLE COPY

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify):

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,500$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,500$ kgs GVWR)
- (24) Van based school bus ($\leq 4,500$ kgs GVWR)
- (25) Van based other bus ($\leq 4,500$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify):

- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):

- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,500$ kgs GVWR)

- (60) Step van ($> 4,500$ kgs GVWR)
- (61) Single unit straight truck ($4,500$ kgs $<$ GVWR $\leq 8,850$ kgs)
- (62) Single unit straight truck ($8,850$ kgs $<$ GVWR $\leq 12,000$ kgs)
- (63) Single unit straight truck ($> 12,000$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify):
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
17. Number of Occupants This Vehicle 0 2
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
18. Number of Occupant Forms Submitted 0 2

24. Rollover 0
 (0) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)

- (1) Rollover, 1 quarter turn only
 (2) Rollover, 2 quarter turns
 (3) Rollover, 3 quarter turns
 (4) Rollover, 4 or more quarter turns (specify):

- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (9) Rollover (overturn), details unknown

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1, 8 3 0
 _____ Code weight to nearest 10 kilograms.
 (045) Less than 450 kilograms
 (610) 6,100 kilograms or more
 (999) Unknown
0 4, 0 2 6 lbs X .4536 = 1, 8 3 0 kgs
 Source: _____
20. Vehicle Cargo Weight 0 0 0 0
 _____ Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (450) 4,500 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0

26. Rear Override/Underride (this Vehicle) 0

- (0) No override/underride, or not an end-to-end impact

Override (see specific CDC)

- (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):

Underride (see specific CDC)

- (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override
 (9) Unknown

RECONSTRUCTION DATA

21. Towed Trailing Unit 0
 (0) No towed unit
 (1) Yes--towed trailing unit
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0
 (0) No
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
 (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted <45 degrees
 (4) Tilted ≥45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):

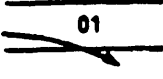

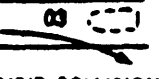
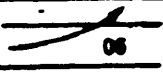

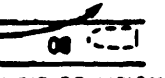


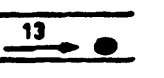
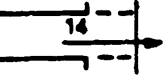
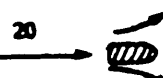


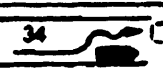
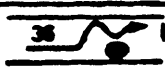

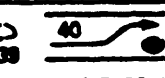
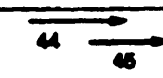

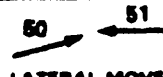
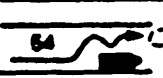
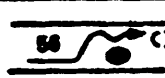
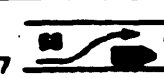

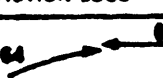
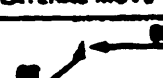
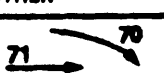

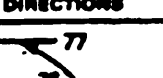
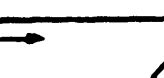
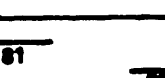
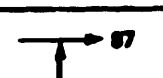
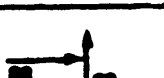
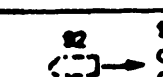
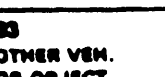
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

27. Heading Angle For This Vehicle 9 9 8

28. Heading Angle For Other Vehicle 9 9 8

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 24 SLOWER 25, 26, 27	 28 DECEL. 29, 30, 31	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER (EACH • 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 LATERAL MOVE	 46 LATERAL MOVE	(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER (EACH • 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 73 INITIAL SAME DIRECTIONS	(EACH • 74) SPECIFICS OTHER	(EACH • 75) SPECIFICS UNKNOWN
	K Turn Into Path	 77 TURN INTO SAME DIRECTION	 79 TURN INTO OPPOSITE DIRECTIONS	 81 TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 87	 89	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest)

1*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Secondary Highest

0 1 817.9 Nearest kph

(NOTE: 000 means less than
0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of
Delta V+ 0 1 8-17.6 Nearest kph

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(__999) Unknown

32. Lateral Component of Delta V

Secondary

Highest

+ 0 0 3-3.1 Nearest kph

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(__999) Unknown

33. Energy Absorption

0 2 4.2 0 02478.4 Nearest 100 joules

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

34. Confidence In Reconstruction Program
Results (For Highest Delta V)4

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

2

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

REPAIR INSPECTION + PHOTOGRAPHS

36. Is this an AOPS Vehicle?

1

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [X] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence φ

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver φ

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver φ

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION

OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>φ</u>	41. <u>φ</u>
Depressant Drug	42. <u>φ</u>	43. <u>φ</u>
Stimulant Drug	44. <u>φ</u>	45. <u>φ</u>
Hallucinogen Drug	46. <u>φ</u>	47. <u>φ</u>
Cannabinoid Drug	48. <u>φ</u>	49. <u>φ</u>
Phencyclidine (PCP)	50. <u>φ</u>	51. <u>φ</u>
Inhalant Drug	52. <u>φ</u>	53. <u>φ</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>φ</u>	55. <u>φ</u>

Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify): _____
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Fire truck or car
 (8) Other (specify): _____
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type specify): _____
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

φ φ

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

φ

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (8) Non-contact rollover forces (specify): _____
 (9) Unknown

63. Direction of Initial Roll

φ

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

φ 1

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify): _____
 (98) No driver present
 (99) Unknown

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
(01-30) — Vehicle Number

Noncollision

(31) Turn-over — fall-over
(33) Jackknife

Collision With Fixed Object

(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail)
(specify): _____

(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify): _____

(69) _____
Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(88) Other nonfixed object (specify): _____

(89) _____
Unknown nonfixed object

(98) Other event (specify): _____

(99) _____
Unknown event or object

PRECRASH DATA (Continued)

65. Critical Precrash Event φ 9*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): _____

(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver φ

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) φ

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

DSI-93-AB-016

3. Vehicle Number

01

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF / 6. RF / 7. LR / 8. RR / 9. TG/H /

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch
Opening in Collision. If IV05-IV09 \neq 2, Then code 0

10. LF / 11. RF / 12. LR / 13. RR / 14. TG/H /

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS / 16. LF / 17. RF / 18. LR / 19. RR /
20. BL / 21. Roof / 22. Other /

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from
impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS / 24. LF / 25. RF / 26. LR / 27. RR /
28. BL / 29. Roof / 30. Other /

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant
contact and not holed by occupant contact(5) Glazing out-of-place by occupant contact and holed by
occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No
Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS / 32. LF / 33. RF / 34. LR / 35. RR /
36. BL / 37. Roof / 38. Other /

(0) No glazing contact and no damage, or no glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted

(4) AS-14 - Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS / 40. LF / 41. RF / 42. LR / 43. RR /
44. BL / 45. Roof / 46. Other /

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(9) Unknown

Note: Sketch intruded areas

Note: Sketch intruded areas



NONE

BEST AVAILABLE COPY

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
Ø	—	Ø	=	Ø
Ø	—	Ø	=	Ø
Ø	—	Ø	=	Ø
Ø	—	Ø	=	Ø

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

Front Seat

- (11) Left
- (12) Middle
- (13) Right

Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

Second Seat

- (21) Left
- (22) Middle
- (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____

(99) Unknown

Third Seat

- (31) Left
- (32) Middle
- (33) Right

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING COLUMN87. Steering Column Type 2

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

88. Blank X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-93 CDS.

89. Blank X X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-93 CDS.

90. Blank X X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-93 CDS.

91. Blank X X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-93 CDS.

92. Steering Rim/Spoke Deformation 0 0

- Code actual measured
 deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

93. Location of Steering Rim/Spoke Deformation

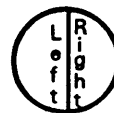
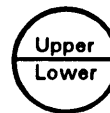
(00) No steering rim deformation

Quarter Sections

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

INSTRUMENT PANEL94. Odometer Reading 0 1 9,000

_____ kilometers—Code to the
 nearest 1,000 kilometers

- (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown

12.000 miles X 1.6093 = 019.312 kilometers

Source: _____

95. Instrument Panel Damage from Occupant Contact? 9

- (0) No
 (1) Yes
 (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 9

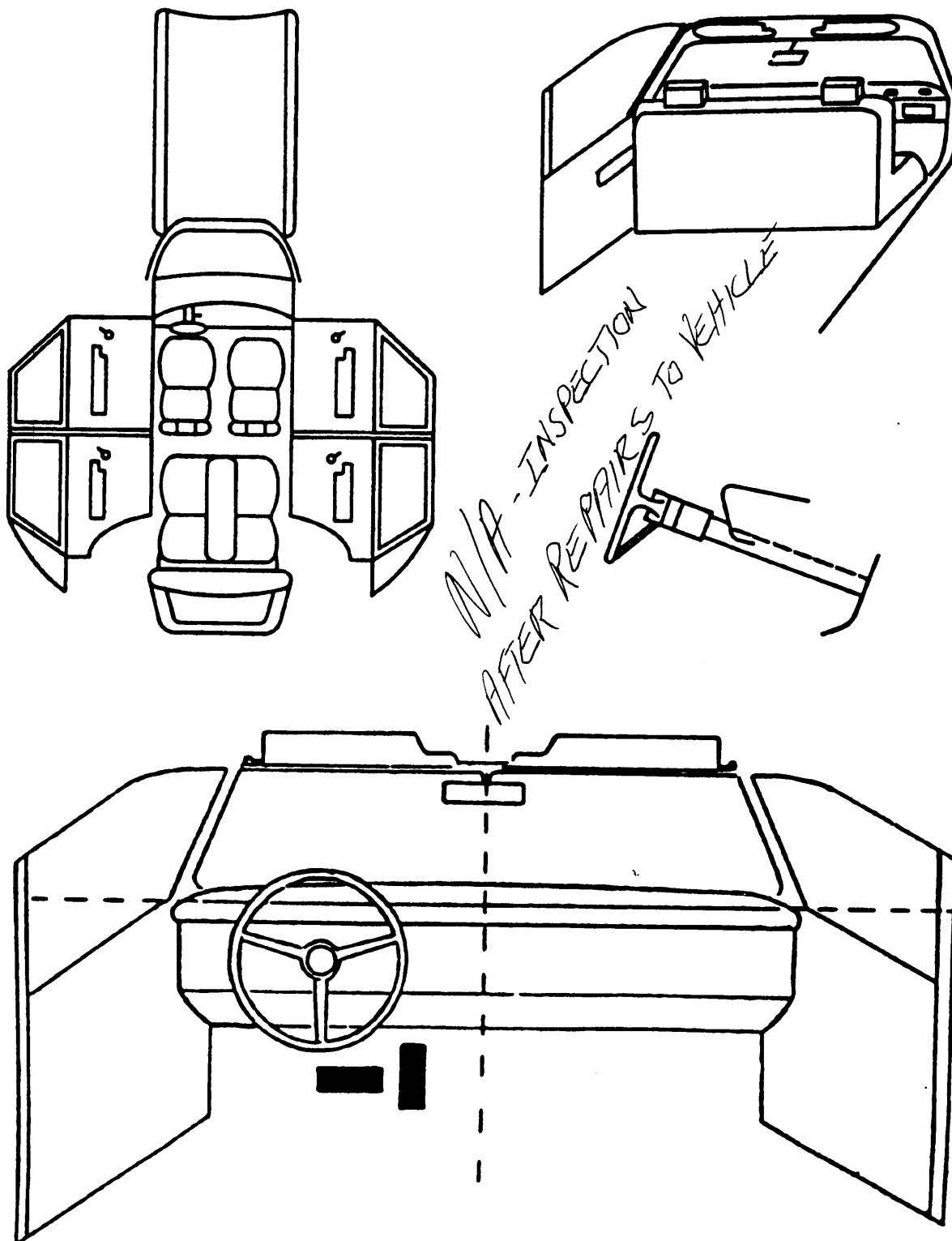
- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

97. Did Glove Compartment Door Open During Collision(s)? 9

- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____
- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____
- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): _____

- (47) Interior loose objects
- (48) Child safety seat (specify): _____

- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
F I R S T	Availability/Function	/	/
	Deployment	/	/
	Failure	/	/

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify): _____
(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment

- (0) Not equipped/not available
(1) Air bag deployed during accident (as a result of impact)
(2) Air bag deployed inadvertently just prior to accident
(3) Air bag deployed, accident sequence undetermined
(4) Nondeployed
(5) Unknown if deployed
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(9) Unknown

Did Air Bag System Fail?

- (0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	Ø	Ø
	Use	Ø	Ø
	Type	Ø	Ø
	Proper Use	Ø	Ø
	Failure Modes	Ø	Ø

Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of automatic belt system (specify): _____
(9) Unknown

Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other automatic belt failure (specify): _____
(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	Ø	4
	Use	Ø4	ØØ	Ø4
	Failure Modes	1	Ø	1
SECOND	Availability	4	3	4
	Use	ØØ	ØØ	ØØ
	Failure Modes	Ø	Ø	Ø
THIRD	Availability	/	/	/
	Use	/	/	/
	Failure Modes	/	/	/
OTHER	Availability	/	/	/
	Use	/	/	/
	Failure Modes	/	/	/

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown

Manual (Active) Belt System Use

(00) None used, not available, or belt removed/destroyed

(01) Inoperable (specify): _____

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used - type unknown

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat - type unknown

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used

Manual (Active) Belt Failure Modes During Accident

(0) No manual belt used or not available

(1) No manual belt failure(s)

(2) Torn webbing (stretched webbing not included)

(3) Broken buckle or latchplate

(4) Upper anchorage separated

(5) Other anchorage separated (specify): _____

(6) Broken retractor

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

- 5. Child Safety Seat Tether Usage
- Note: Options Below Are Used for Variables 3-5.
- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model (Specify make/model and occupant number)

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	φ	3
	Seat Type	φ6	φφ	φ6
	Seat Performance	1	φ	1
	Seat Orientation	1	φ	1
SECOND	Head Restraint Type/Damage	φ	φ	φ
	Seat Type	φ3	φ3	φ3
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
OTHER	Head Restraint Type/Damage			
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: _____

(9) Unknown

Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

(10) Box mounted seat (i.e., van type)

(99) Unknown

Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown

Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

- (9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

- (9) Unknown

Medium Status (Immediately Prior to Impact)

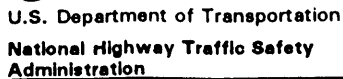
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [☒] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note: in vehicle interior diagram)



VEHICLE IDENTIFICATION

LOCATOR

CRUSH PROFILE IN CENTIMETERS

Use as many lines/columns as necessary to describe each damage profile.

ORIGINAL SPECIFICATIONS WORK SHEET

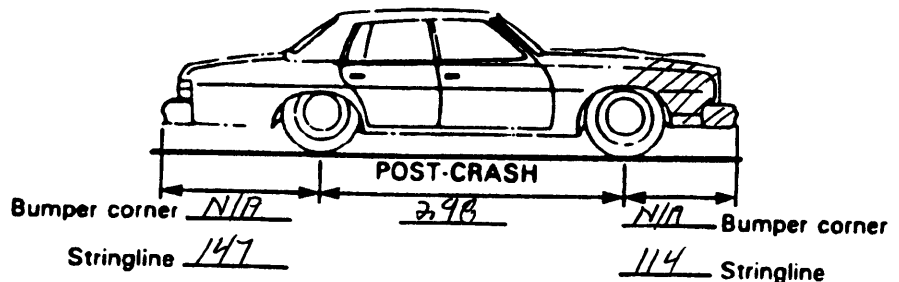
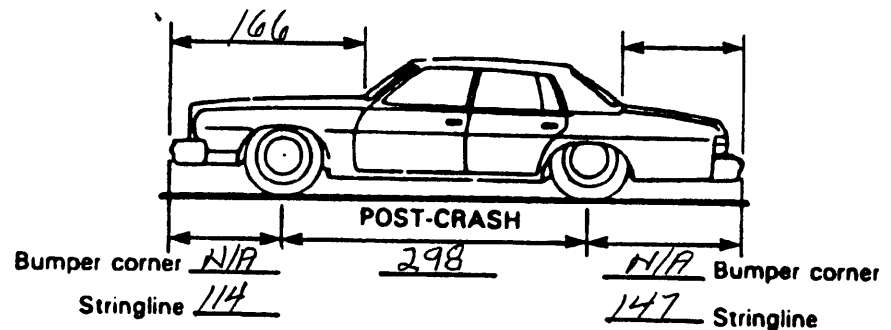
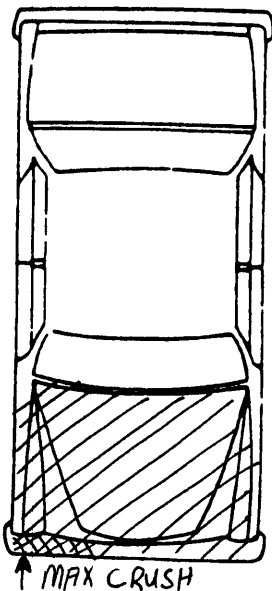
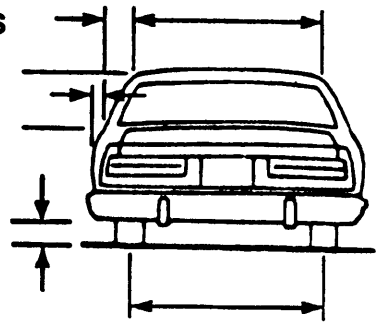
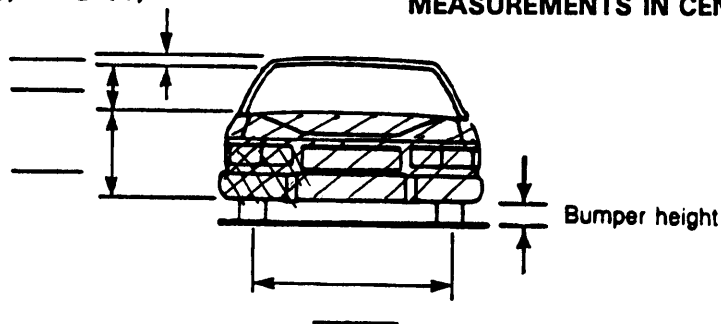
Wheelbase	<u>1</u> <u>1</u> <u>7.3</u> inches	x 2.54 =	<u>2</u> <u>9</u> <u>8</u> cm
Overall Length	<u>2</u> <u>3</u> <u>0.1</u> inches	x 2.54 =	<u>5</u> <u>5</u> <u>9</u> cm
Maximum Width	<u>0</u> <u>7</u> <u>8.3</u> inches	x 2.54 =	<u>1</u> <u>9</u> <u>9</u> cm
Curb Weight	<u>0</u> <u>4</u> , <u>0</u> <u>2</u> <u>6</u> pounds	x .4536 =	<u>1</u> , <u>8</u> <u>3</u> <u>0</u> kg
Average Track	<u>0</u> <u>6</u> <u>3.1</u> inches	x 2.54 =	<u>1</u> <u>6</u> <u>0</u> cm
Front Overhang	<u>0</u> <u>4</u> <u>4.9</u> inches	x 2.54 =	<u>1</u> <u>1</u> <u>4</u> cm
Rear Overhang	<u>0</u> <u>5</u> <u>7.9</u> inches	x 2.54 =	<u>1</u> <u>4</u> <u>7</u> cm
Undeformed End Width	<u> </u> <u>N/A</u> <u> </u> inches	x 2.54 =	<u> </u> <u>N/A</u> <u> </u> cm
Engine Size: cyl./displ.	<u>5</u> <u>0</u> <u>0</u> <u>0</u> cc	x .001 =	<u>5</u> <u>0</u> L
	<u>3</u> <u>0</u> <u>5</u> CID	x .0164 =	<u>5</u> <u>0</u> L

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted RF _____ LF _____ RR _____ LR _____ (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF _____ LF _____ RR _____ LR _____		ORIGINAL SPECIFICATIONS Wheelbase <u>298</u> cm Overall Length <u>559</u> cm Maximum Width <u>199</u> cm Curb Weight <u>1830</u> kg Average Track _____ cm Front Overhang <u>114</u> cm Rear Overhang <u>147</u> cm Undeformed End Width <u>N/A</u> cm Engine Size: cyl./displ. <u>5.0</u> L		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF ± _____ ° LF ± _____ ° RR ± _____ ° LR ± _____ ° Within ± 5 degrees	
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic				DRIVE WHEELS <input type="checkbox"/> FWD <input checked="" type="checkbox"/> RWD <input type="checkbox"/> 4WD		Approximate Cargo Weight <u>0</u> kg	

"PHOTOGRAPHS"

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

(31) Overturn — rollover

(32) Fire or explosion

(33) Jackknife

(34) Other intraunit damage (specify):

(35) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

(41) Tree (≤ 10 cm in diameter)(42) Tree (> 10 cm in diameter)

(43) Shrubbery or bush

(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (≤ 10 cm in diameter)(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)(52) Pole or post (> 30 cm in diameter)

(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail) (specify):

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
<u>01</u>	<u>02</u>	<u>999</u>	<u>99</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>99</u>
<u>02</u>	<u>56</u>	<u>005</u>	<u>00</u>	<u>F</u>	<u>Z</u>	<u>E</u>	<u>W</u>	<u>01</u>
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>Ø 2</u>	5. <u>5 6</u>	6. <u>1 2</u>	7. <u>F</u>	8. <u>Z</u>	9. <u>E</u>	10. <u>W</u>	11. <u>Ø 1</u>

Second Highest Delta "V"

12. <u>Ø 1</u>	13. <u>Ø 2</u>	14. <u>9 9</u>	15. <u>9</u>	16. <u>9</u>	17. <u>9</u>	18. <u>9</u>	19. <u>9 9</u>
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CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>± D</u>
" CDC ONLY - PHOTOGRAPHS "							+ - _____

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>± D</u>
" MASKED DAMAGE "							+ - _____

26. Are CDCs Documented but Not Coded on The Automated File? Ø
(0) No
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

28. Original Wheelbase 298
Code to the nearest centimeter
(999) Unknown

117.3 inches X 2.54 = 298 centimeters

29. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

Ø

(0) No post manufacturer modifications

(1) Yes - post manufacturer modifications

(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence

Ø

(0) No fire

Yes, fire occurred

(1) Minor

(2) Major

(9) Unknown

31. Origin of Fire

Ø

(0) No fire

(1) Vehicle exterior (front, side, back, top)

(2) Exhaust system

(3) Fuel tank (and other fuel retention
system parts)

(4) Engine compartment

(5) Cargo/trunk compartment

(6) Instrument panel

(7) Passenger compartment area

(8) Other location (specify): _____

(9) Unknown

32. Type of Fuel Tank

1

(0) No fuel tank (electrical vehicle)

(1) Metallic

(2) Non-metallic

(9) Unknown

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS ***
(I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERVIEW FORM (A)

1. Primary Sampling Unit Number _____	Interviewee(s) Role or Name(s): <u>DRIVER OF</u>
2. Case Number - Stratum <u>DS1-93-AB-016</u>	<u>VEHICLE 1</u>
3. Vehicle Number <u>01</u>	_____

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

The driver stated that she was traveling northbound on _____ Route and was turning left onto a entrance ramp of the ---- Parkway. When she started to travel on the ramp she lost control of the vehicle on the wet roadway. The driver stated that she struck a guardrail on the right side of the entrance ramp.

The driver indicated that she smell chemical order and seen smoke after the airbag deployed.

The driver stated that she was taken to _____ Hospital and was treated and release approximately 5 hours later. Her injuries consisted of facial burns (whole face), injury to her right eye, burn on her right wrist.

The driver's info.

Age: 61

Height: 5'1"

Weight: wouldn't say

The right front passenger

Age: 29

Height: 5'4"

Weight: 117 lbs.

OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

ACCIDENT DIAGRAM

NORTH

The use of this diagram is optional. It may serve to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.



INTERVIEW FORM (B)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____

2. Case Number - Stratum DS1-93-AB-0163. Vehicle Number 01Interviewee(s) Role or Name(s): DRIVER OFVEHICLE 1

ACCIDENT DATA QUESTIONS

1. Can you tell me in which direction you were traveling?☒ North ☐ South ☐ East ☐ West(Optional - Where were you coming from or going to?)
_____2. In which lane were you traveling?

(Note: Lane 1 is designated as the right curb lane.)

☐ [1] ☐ [2] ☐ [3] ☐ [4] ☒ Other (specify):ON ENTRANCE RAMP3. Can you remember your estimated travel speed (in miles per hour) before the accident? UNK☐ Stopped ☐ 1-10 ☐ 10-20
☐ 20-30 ☐ 30-40 ☐ 40-50
☐ 50-60 ☐ 60-70 ☐ 70+

4. Just before the accident, can you tell me what you were intending to do or were doing?

☒ Going straight ☐ Stopped
☐ Slowing ☐ Accelerating
☐ Turning left ☐ Turning right
☐ Changing lanes to left ☐ Changing lanes to right
☐ Backing
☐ Other (specify): _____5. Did you experience any loss of control due to weather conditions or mechanical problems?☐ No
☒ Yes (If yes, describe below)WET ROADWAY6. Did you have to take any avoidance actions prior to the accident?☒ No - Go to question 7
☐ Yes - Go to question 6a6a. What actions did you take?☐ Braking with lock-up
☐ Braking without lock-up
☐ Releasing brakes
☐ Accelerating
☐ Steering left
☐ Steering right
☐ Other (specify): _____7. Where was your vehicle at the time of the collision?☐ Original travel lane ☐ Different travel lane
☐ In intersection ☐ Off roadway to right
☐ Off roadway to left
☒ Other (specify): RAMP8. Was your travel speed at the time of the collision different from your previous travel speed?☐ No
☐ Lower
☐ Higher
☒ Unknown8a. Can you estimate your speed at the time of the collision? No☐ Stopped ☐ 1-10 ☐ 10-20
☐ 20-30 ☐ 30-40 ☐ 40-50
☐ 50-60 ☐ 60-70 ☐ 70+9. Immediately following the collision, can you describe how your vehicle moved to its stopped position?No

10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?

TWO - VEHICLE/VEHICLE +VEHICLE/GUARD RAIL

National Accident Sampling System-Crashworthiness Data System: Interview Form

Page 2

1. Primary Sampling Unit Number _____

3. Vehicle Number 01

2. Case Number - Stratum

DSI-93-AB-0164. Occupant Number 01

VEHICLE/DRIVER DATA QUESTIONS

1. Can you tell me the year, make, model of your vehicle?

1990 LINCOLN TOWN CAR
 Year Make Model

2. Can you describe the damage to your vehicle?

RIGHT FRONT CORNER

3. Was there any previous damage to your vehicle that is not related to this accident?

☒ No☐ Yes (If "yes", describe below)

4. Did any of the doors (hatch, tailgate) open during the accident?

☒ No☐ Yes (If "Yes", describe below)

5. Did any of the windows break during the accident?

☒ No☐ Yes (If "Yes", describe below)

6. Does your vehicle have a glove compartment?

☐ No☒ Yes

6a. Did the glove compartment door come open during the accident?

☒ No☐ Yes☐ Unknown

7. Does your vehicle have "seat belts"?

☐ No (If "No", go to question 7b)☒ Yes (If "Yes", go to question 7a)

7a. Can you describe the type of seat belt for each seat?

Driver's seat	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Front seat middle	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Front seat right	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Rear seat left	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Rear seat middle	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Rear seat right	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder

(Identify seat belts for third row and beyond)

7b. Were any of the belts removed or not functional prior to the accident?

☒ No☐ Yes (If "Yes", specify which belt and describe problem)

8. Do any of the front belts move along a motorized track when the door is opened or closed?

☒ No (If "No", go to question 9)☐ Yes (If "Yes", what seat location?)☐ Left Front☐ Right Front

8a. Were the motorized belts working properly before the accident?

☐ No (If "No", describe condition below)☐ Yes

8b. Were the belts connected to the track prior to the accident?

☐ No☐ Yes☐ Unknown

9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?

☒ No (go to question 10)☐ Yes

9a. Does this belt come across the _____?

☐ Chest only☐ Lap and chest

9b. Was this belt connected prior to the accident?

☐ No☐ Yes☐ Unknown

AIR BAGS

10. Is your vehicle equipped with a driver's side air bag?

☐ No (go to question 11)☒ Yes (go to question 10a)☐ Unknown (go to question 11)

10a. Did the air bag inflate during the accident?

☐ No (go to questions 10b and 10c)☒ Yes (go to question 10e)

1. Primary Sampling Unit Number _____

3. Vehicle Number 012. Case Number - Stratum DSI-93-AB-0164. Occupant Number 01**VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)**

10b. Was the air bag wiring disconnected prior to the accident?

☒ No☐ Yes (If "Yes", describe previous condition)☐ Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?

☒ No (go to question 11)☐ Yes (go to question 10d)☐ Unknown

10d. Was the air bag re-installed after the accident?

☐ No (go to question 11)☒ Yes / but is now disconnected☐ Unknown

10e. Did the air bag inflate as you expected?

☒ No (If "No" describe below)Rel's BURNS ON MY FACE☐ Yes☐ Unknown

11. Is your vehicle equipped with a passenger side air bag?

☐ No (If "No", go to question 12)☒ Yes (If "Yes", go to question 11a)☐ Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?

☐ No (go to question 11b)☒ Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?

☒ No☐ Yes (If "Yes", describe below)☐ Unknown

11c. Was the passenger air bag inflated in a previous accident?

☒ No (go to question 12)☐ Yes (go to question 11d)☐ Unknown

11d. Was the passenger air bag re-installed after the accident?

☐ No (go to question 12)☒ Yes☐ Unknown

11e. Did the passenger air bag inflate as you expected?

☐ No (If "No" describe below)☒ Yes☐ Unknown**CHILD SAFETY SEAT**

12. Was there a person in a child safety seat in your vehicle?

☐ No (If "No", go to question 13)☐ Yes☐ Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?

12b. Can you describe the type of child safety seat?

☐ Infant☐ Toddler☐ Convertible☐ Booster☐ Other (specify): _____☐ Unknown

12c. Where was the child safety seat(s) located?

☐ [12] ☐ [13]☐ [21] ☐ [22] ☐ [23]☐ [31] ☐ [32] ☐ [33]☐ [Other] (specify): _____

12d. Can you tell me which direction the child safety seat was facing prior to the accident?

☐ Rear facing☐ Forward facing☐ Other (specify): _____☐ Unknown

12e. Was a seat belt used to hold the child seat in place?

☐ No (If "No", go to question 12g)☐ Yes (If "Yes", go to question 12f)☐ Unknown

12f. Can you describe how the seat belt was secured to the child seat?

☐ Looped through designated rear framing struts?☐ Looped through arm rest slots?☐ Belt across safety shield?☐ Looped through rear frame outside the designated framing struts?☐ Other (specify): _____☐ Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)

☐ Harness☐ Shield☐ Tether strap

If any box is checked, ask questions 12h - 12i.

National Accident Sampling System-Crashworthiness Data System: Interview Form

Page 4

1. Primary Sampling Unit Number _____

3. Vehicle Number 012. Case Number - Stratum DSI-93-AB-0164. Occupant Number 01**VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)**

12h. Were any of these items added after you owned the child safety seat?

☐ Yes

(specify _____)

☐ No☐ Unknown

12i. Were any of these items used during the accident?

☐ Yes (If "Yes", check all that apply)☐ Harness☐ Shield☐ Tether strap☐ No☐ Unknown**OPTIONAL**

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?

16. May I take a look at your vehicle to assess the damage?

☐ No☐ Yes**CARGO WEIGHT AND MILEAGE**

13. Was there any cargo in your vehicle?

☒ No (If "No", go to question 14)☐ Yes (If "Yes", go to question 13a)☐ Unknown

13a. Can you estimate the weight of the cargo?

_____ lbs.

Cargo description

14. Can you tell me the mileage on the vehicle?

_____ miles

DRIVER ONLY

17. What race do you consider yourself?

☒ White☐ Black☐ American Indian, Eskimo or Aleut, Asian or Pacific Islander☐ Other (specify: _____)☐ Unknown.

18. Are you of hispanic origin?

☒ No☐ Yes

1. Primary Sampling Unit Number _____

3. Vehicle Number 012. Case Number - Stratum DSI-93-AB-0164. Occupant Number 01**OCCUPANT DATA QUESTIONS**

1. Was there anyone else in your vehicle at the time of the accident?

☐ No (If "No", go to question 4)☒ Yes (If "Yes", specify number in question 2 below and then go to question 3)☐ Unknown

2. How many?

☒ (1) One other person☐ (2) Two other persons☐ (3) Three other persons☐ (4) Four other persons☐ (5) Five other persons☐ (6) Six other persons☐ (7) Seven or more other persons
(specify number:)

3. Where was this person sitting? (Circle seating positions)

	[12]	<u>(13)</u>
[21]	[22]	[23]
[31]	[32]	[33]

☐ Other (specify:)**OCCUPANT CHARACTERISTICS**

4. Can I have your (his/her) height, weight, age, and sex?

Height 61" Weight UNK Age 61Sex: ☐ Male ☒ Female**OCCUPANT POSTURE**

5. Can you tell me how you (he/she was) were sitting in your vehicle?

UPRIGHT - SEAT POSITION CLOSE
TO STEERING WHEEL because her size

5a. Can you describe the location of your (his/her) feet just prior to the collision?

UNK

5b. Can you describe the location of your (his/her) arms?

hands ON STEERING WHEEL

5c. Was your (his/her) back resting against the seat back rest?

☐ No (If "No", describe the position)☒ Yes☐ Unknown

5d. Were you (Was he/she)

☒ Sitting upright or☐ Leaning to left side, or☐ Leaning to right side?**OCCUPANT EJECTION**

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

☒ No (If "No", go to question 7)☐ Yes (If "Yes", go to question 6a)☐ Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?

☐ No☐ Yes (Describe:)**OCCUPANT RESTRAINT**

7. Were you (Was he/she) wearing a seat belt just before the accident?

☐ No (If "No", go to question 8)☒ Yes☐ Unknown

7a. Were you (Was he/she) wearing the

☐ Lap belt?☒ Lap and Shoulder belt?☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

☐ Across the stomach☒ Low on lap☐ Other (specify:)☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

☒ Over the shoulder☐ Under the arm☐ Behind the back☐ Behind the seat☐ Other (specify:)

7d. Did any part of the belt system break or tear?

☒ No☐ Yes (If "Yes", describe)☐ Unknown**OCCUPANT ENTRAPMENT**

8. Were you (Was he/she) trapped in the vehicle?

☒ No☐ Yes (If "Yes", describe)☐ Unknown

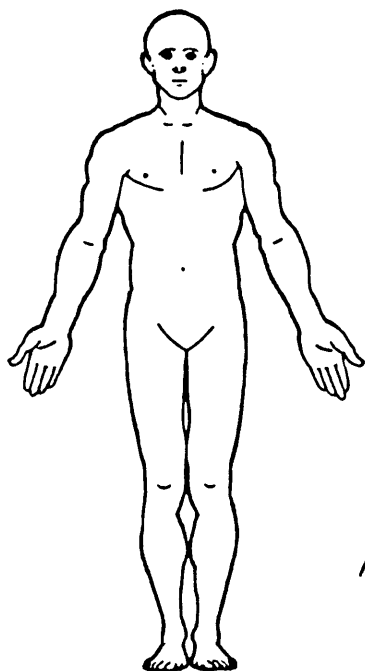
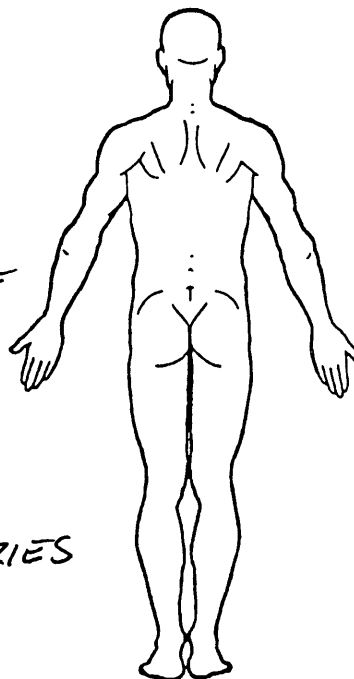
National Accident Sampling System-Crashworthiness Data System: Interview Form

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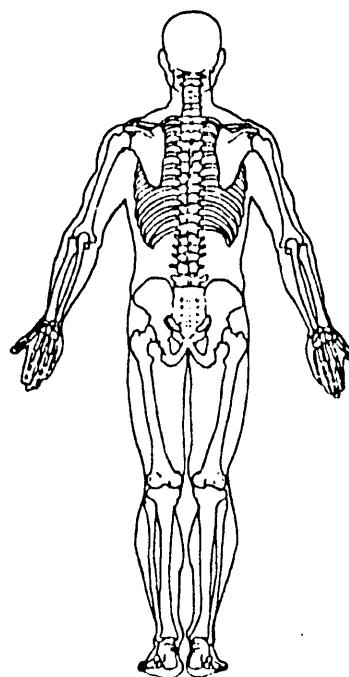
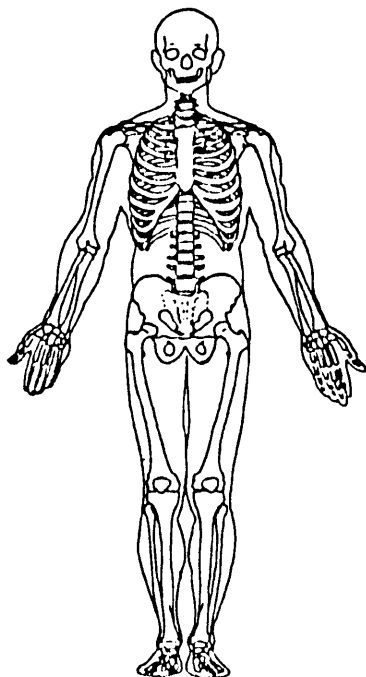
PSU Number _____

Case Number—Stratum DSL-93-AB-416 Vehicle Number 01Occupant Number 01**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): DRIVER

SOFT TISSUE/INTERNAL INJURIES

BURNS ON
ENTIRE FACEINJURY TO
THE RIGHT EYEBURN ON
RIGHT WRISTAIR BAG INJURIES

SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number _____

3. Vehicle Number 012. Case Number - Stratum DSI-93-AB-0164. Occupant Number 01**OCCUPANT INJURY DATA QUESTIONS**

1. Were you (Was he/she) injured?

- ☐ No (If "No", go to next occupant. Stop if no other occupant.)
☒ Yes (If "Yes", complete Occupant Injury Questions)
☐ Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

- ☒ No (go to question 3)
☐ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)
☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

- ☒ No
☒ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
☐ Unknown

3. Did you (he/she) experience any broken bones?

- ☒ No (If "No", go to question 4)
☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)
☐ Unknown

3a. Do you know what caused the injury(s)?

- ☐ No
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
☐ Unknown

4. Did you (he/she) injure your (his/her) head?

- ☐ No (If "No", go to question 5)
☒ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)
☐ Unknown

4a. Do you know what caused the injury(s)?

- ☐ No
☒ Yes (If "Yes", specify the component(s) on the manikin(s).)
☐ Unknown

5. Were any of your (his/her) internal organs injured?

- ☐ No (If "No", go to question 6)
☒ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)
☐ Unknown

5a. Do you know what caused this injury?

- ☐ No
☒ Yes (If "Yes", specify the component(s) on the manikin(s).)
☐ Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

- ☒ No (If "No", go to question 7)
☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)
☐ Unknown

6a. Do you know what caused the injury(s)?

- ☐ No
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)
☐ Unknown

7. Did you (he/she) receive treatment for your (his/her) injury(s)?

- ☐ No (If "No", go to question 8)
☒ Yes (If "Yes", go to question 7a)

7a. Were you (Was he/she) treated by:

- ☒ Hospital/trauma center? (specify hospital name): _____
☐ Medical clinic
☐ Out patient surgery? (specify medical facility:) _____
☐ Paramedics or first aid at the scene?
☐ A doctor in his/her office?
☐ Treated at home?
☐ None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

- ☐ No (If "No", go to question 7c.)
☒ Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

- ☒ No (If "No", give an explanation)
☐ Yes (If "Yes", go to question 7d.)

7d. How many days were you (was he/she) in the hospital?
_____ days

National Accident Sampling System-Crashworthiness Data System: Interview Form

Page 8

1. Primary Sampling Unit Number _____

3. Vehicle Number 012. Case Number - Stratum DS1-93-AB-0164. Occupant Number 01**OCCUPANT INJURY DATA QUESTIONS (CONTINUED)**

7e. Have you (Has he/she) received any follow-up treatment?

☐ No☒ Yes (If "Yes", describe:)FOR FACIAL BURNS☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☐ Not working prior to the accident☐ Unknown

National Accident Sampling System-Crashworthiness Data System: Interview Form

Page 8

- | | |
|---------------------------------------|--------------------------|
| 1. Primary Sampling Unit Number _____ | 3. Vehicle Number _____ |
| 2. Case Number - Stratum _____ | 4. Occupant Number _____ |

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☐ No

☐ Yes (If "Yes", describe:)

☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No

☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No

☐ Yes (If "Yes", determine the number of days lost) (Specify:)

☐ Not working prior to the accident

☐ Unknown



OCCUPANT ASSESSMENT FORM

OCCUPANT'S SEATING

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

61 inches X 2.54 = 155 centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

_____ pounds X .4536 = _____ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front
of seat

(8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection φ

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area φ

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium φ

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) φ

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment φ

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify):

(9) Unknown

18. Manual (Active) Belt System Use 0 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify):

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify):

(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 7

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify):
AIR BAG
- (8) Restrained, type unknown
- (9) Police indicated "unknown"

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____
- (9) Unknown

26. Seat Type (this Occupant Position) 06

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model

Ø Ø Ø

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat

Ø

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation

Ø Ø

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage

Ø Ø

32. Child Safety Seat Shield Usage

Ø Ø

33. Child Safety Seat Tether Usage

Ø ØNote: Options below applicable to
Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

34. Injury Severity (Police Rating)

3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality

4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay

0 0

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

99. Case Occupant

1

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

38. Working Days Lost

9 9

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**

39. Time to Death

0 0

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death

0 0

41. 2nd Medically Reported Cause of Death

0 0

42. 3rd Medically Reported Cause of Death

0 0

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant

0 5

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM44. Automatic (Passive) Belt System Availability/ Function Ø

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use Ø

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____

- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type Ø

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System Ø

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____

- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident Ø

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

- (9) Unknown

STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**TRAUMA DATA**50. Glasgow Coma Scale (GCS) Score 9 7
(at Medical Facility)

- (00) Not injured
- (01) Injured - not treated at medical facility
- (02) No GCS Score at medical facility
- (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
- (97) Injured, details unknown
- (99) Unknown if injured

51. Was the Occupant Given Blood? 9

- (1) No - blood not given
- (2) Yes - blood given (specify units): _____
- (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 9 7

- (00) Not injured
- (01) Injured, ABGs not measured or reported
- (02-50) Code the actual value of the HCO₃
- (96) ABGs reported, HCO₃ unknown
- (97) Injured, details unknown
- (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO []

YES [X]

UPDATE CANDIDATE?

NO [X]

YES []



U.S. Department of Transportation
National Highway Traffic Safety
Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	4. Occupant Number

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	O.I.C.-A.I.S						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	ICD-9
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
1st	5. <u>3</u>	6. <u>2</u>	7. <u>9</u>	8. <u>2</u> <u>0</u>	9. <u>1</u> <u>0</u>	10. <u>3</u>	11. <u>0</u>	12. <u>93</u>	13. <u>1</u>	14. <u>3</u>	15. <u>00</u>	<u>941.39</u>
2nd	16. <u>3</u>	17. <u>2</u>	18. <u>4</u>	19. <u>0</u> <u>6</u>	20. <u>0</u> <u>2</u>	21. <u>1</u>	22. <u>1</u>	23. <u>0</u> <u>6</u>	24. <u>1</u>	25. <u>2</u>	26. <u>00</u>	<u>918.1</u>
3rd	27. <u>4</u>	28. <u>2</u>	29. <u>4</u>	30. <u>1</u> <u>6</u>	31. <u>99</u>	32. <u>1</u>	33. <u>1</u>	34. <u>0</u> <u>6</u>	35. <u>1</u>	36. <u>2</u>	37. <u>00</u>	<u>918.9</u>
4th	38. <u>4</u>	39. <u>3</u>	40. <u>9</u>	41. <u>0</u> <u>4</u>	42. <u>0</u> <u>2</u>	43. <u>1</u>	44. <u>2</u>	45. <u>45</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>	<u>920</u>
5th	49. <u>1</u>	50. <u>1</u>	51. <u>9</u>	52. <u>2</u> <u>0</u>	53. <u>0</u> <u>6</u>	54. <u>1</u>	55. <u>1</u>	56. <u>93</u>	57. <u>1</u>	58. <u>3</u>	59. <u>00</u>	<u>944.07</u>
6th	60. ____	61. ____	62. ____	63. ____	64. ____	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____	____
7th	71. ____	72. ____	73. ____	74. ____	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____	____
8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____	____
9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____	____
10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____	____

OCCUPANT INJURY DATA

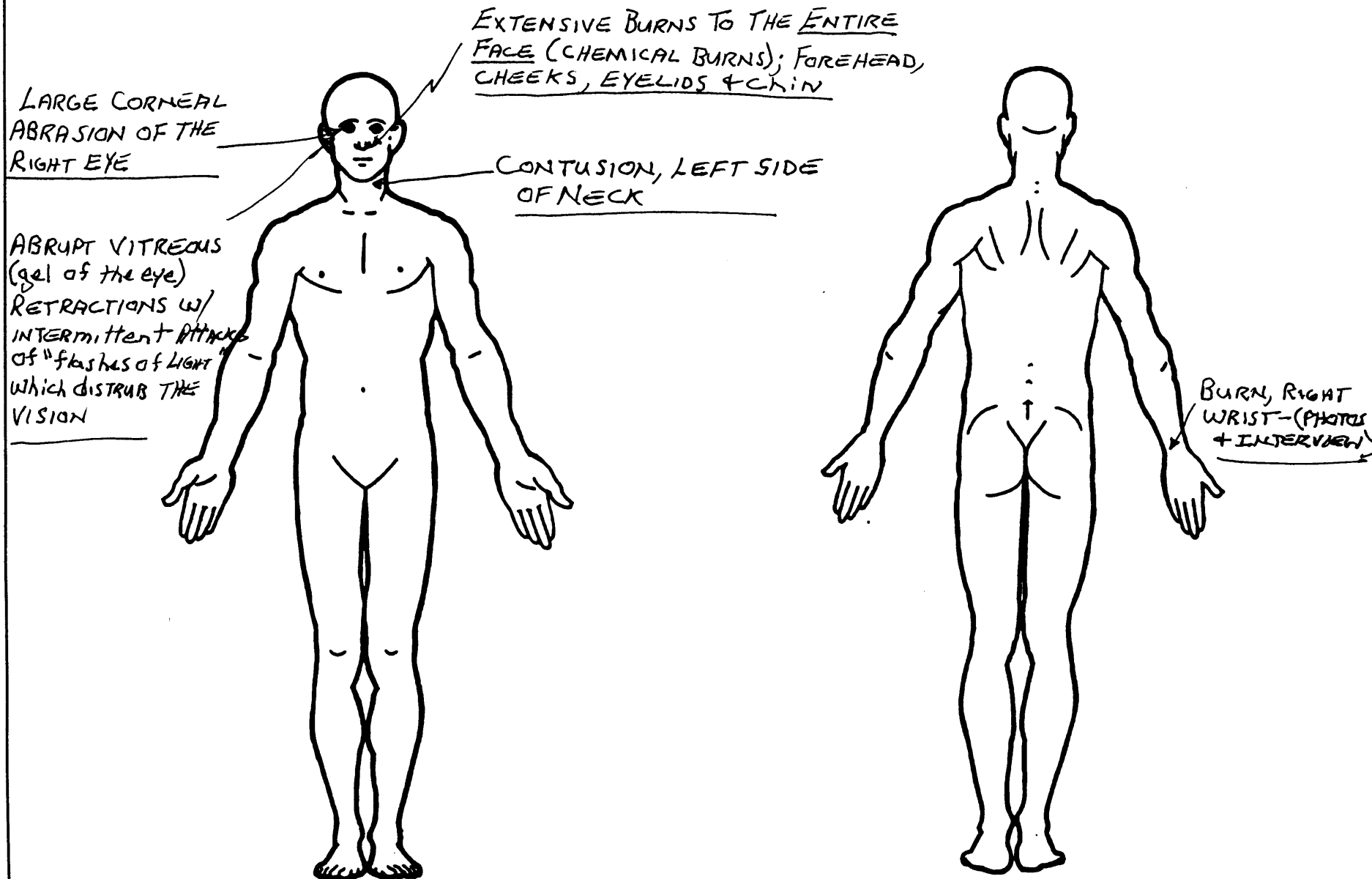
Source of Injury Data	Body Region	Type of Anatomic Structure	O.I.C.-A.I.S.				Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
			Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
11th	---	---	---	---	---	---	---	---	---	---
12th	---	---	---	---	---	---	---	---	---	---
13th	---	---	---	---	---	---	---	---	---	---
14th	---	---	---	---	---	---	---	---	---	---
15th	---	---	---	---	---	---	---	---	---	---
16th	---	---	---	---	---	---	---	---	---	---
17th	---	---	---	---	---	---	---	---	---	---
18th	---	---	---	---	---	---	---	---	---	---
19th	---	---	---	---	---	---	---	---	---	---
20th	---	---	---	---	---	---	---	---	---	---
21st	---	---	---	---	---	---	---	---	---	---
22nd	---	---	---	---	---	---	---	---	---	---
23rd	---	---	---	---	---	---	---	---	---	---
24th	---	---	---	---	---	---	---	---	---	---
25th	---	---	---	---	---	---	---	---	---	---

ICD-9

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

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Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



SOURCE OF INJURY DATA

OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____

- (9) Police

INJURY SOURCE

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 06)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____
- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface

- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

Specific Anatomic Structure

Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones,
Joints are assigned consecutive two digit numbers beginning with 02

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

OFFICIAL INJURY DATA — SKELETAL INJURIES

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Restrained?

___ No

___ Yes

Blood Alcohol
Level (mg/dl)

BAL = ___

Glasgow Coma
Scale Score

GCSS = ___

Units of Blood
Given

Units = ___

Arterial Blood
Gases

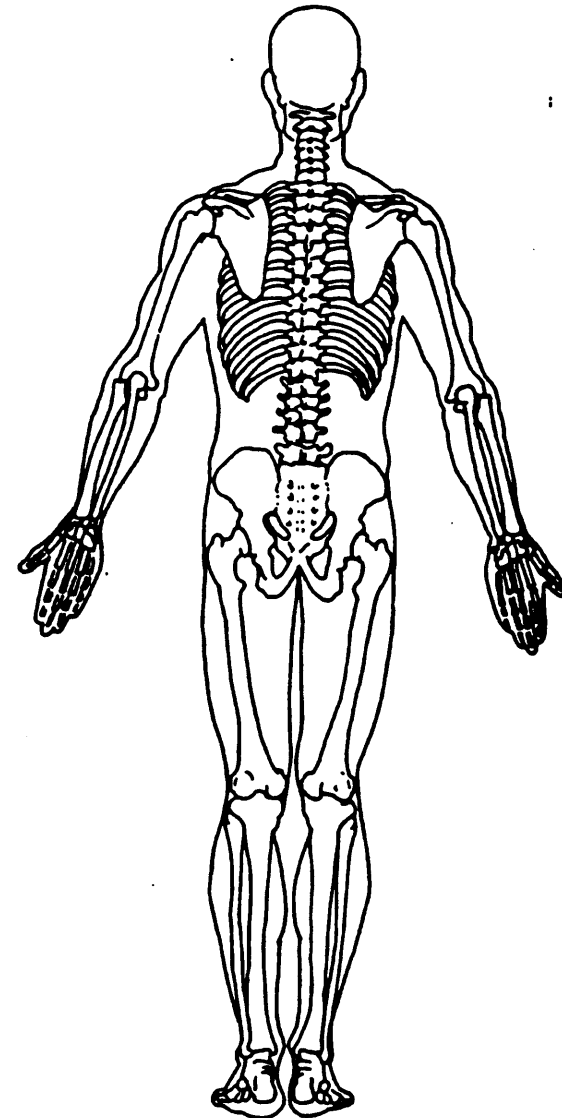
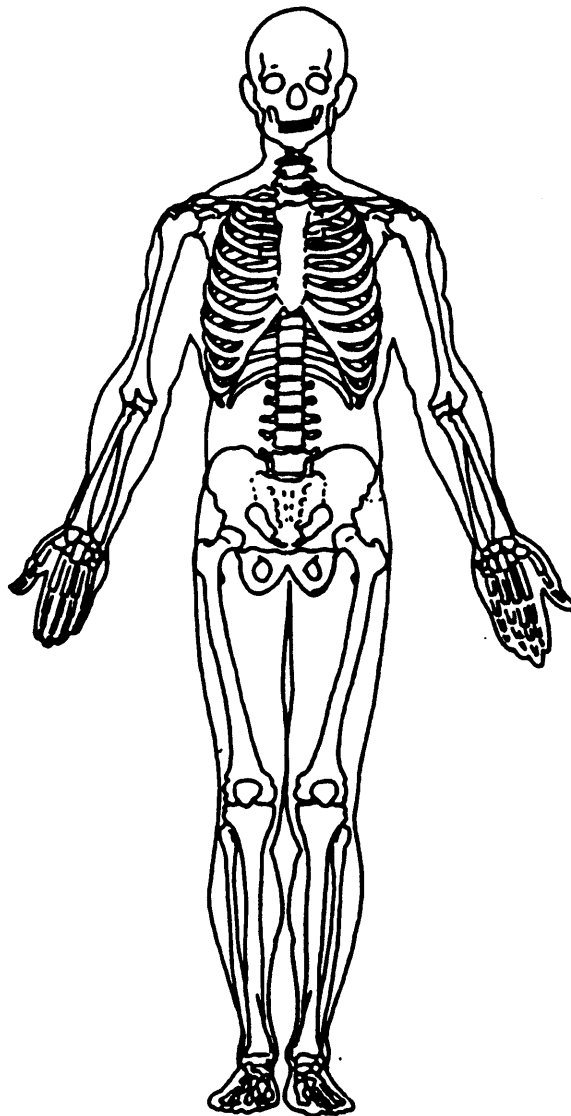
pH = ___

PO₂ = ___

PCO₂ ___

HCO₃ ___

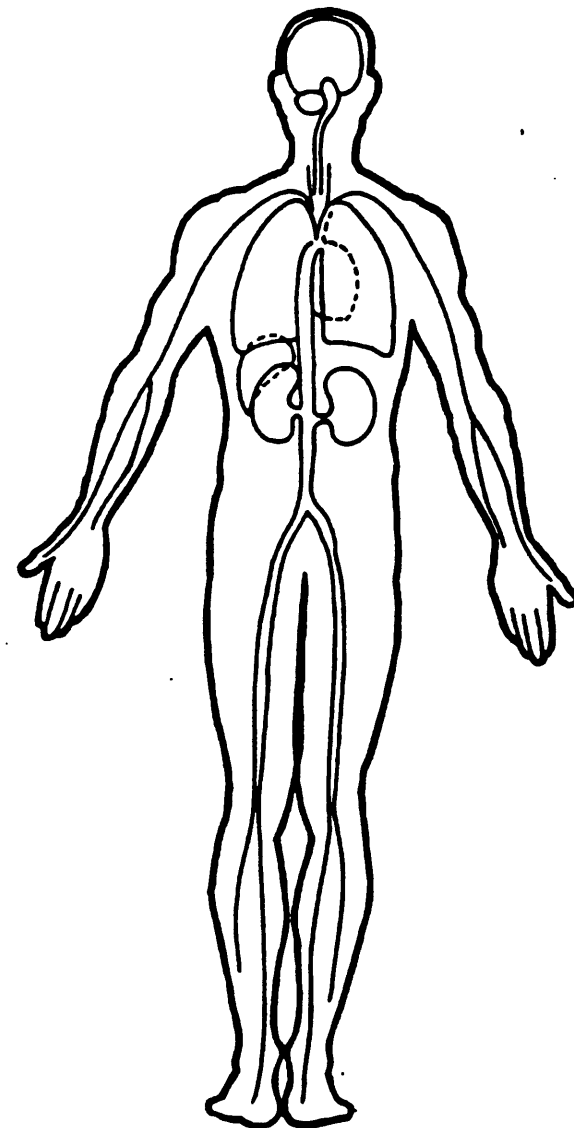
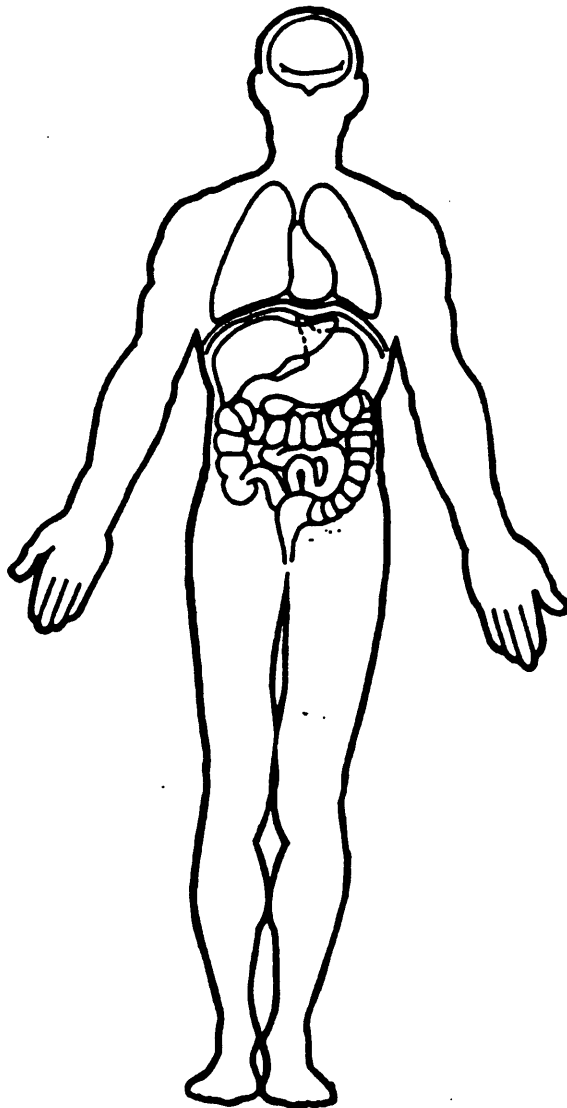
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA —INTERNAL INJURIES

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Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





OCCUPANT ASSESSMENT FORM

OCCUPANT'S SEATING

1. Primary Sampling Unit Number _____
2. Case Number - Stratum DS1-93-AB-016
3. Vehicle Number 01
4. Occupant Number 02

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 29
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older _____
(99) Unknown
6. Occupant's Sex 1
(1) Male
(2) Female
(9) Unknown
7. Occupant's Height 163
Code actual height to the nearest centimeter.
(999) Unknown
64 inches X 2.54 = 163 centimeters
8. Occupant's Weight 053
Code actual weight to the nearest kilogram.
(999) Unknown
117 pounds X .4536 = 053 kilograms
9. Occupant's Role 2
(1) Driver
(2) Passenger
(9) Unknown

10. Occupant's Seat Position 13
Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify): _____
(15) On or in the lap of another occupant

Second Seat
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify): _____
(25) On or in the lap of another occupant

Third Seat
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify): _____
(35) On or in the lap of another occupant

Fourth Seat
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify): _____
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify): _____
(99) Unknown
11. Occupant's Posture 1
(0) Normal posture

Abnormal posture
(1) Kneeling or standing on seat
(2) Lying on or across seat
(3) Kneeling, standing or sitting in front of seat
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window
(5) Sitting on a console
(6) Lying back in a reclined seat position
(7) Bracing with feet or hands on a surface in front of seat
(8) Other abnormal posture (specify): _____
(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection Ø

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area Ø

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium Ø

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) Ø

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment Ø

- (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
- (0) Not entrapped
 - (1) Entrapped
 - (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for information on Automatic Belts

24. Police Reported Restraint Use 7

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown _____

(9) Police indicated "unknown" _____

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____
- (9) Unknown

26. Seat Type (this Occupant Position) 06

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model φ φ φ
 (000) No child safety seat
 Applicable codes are found in your NASS CDS
 Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify):

(998) Unknown make/model
 (999) Unknown if child safety seat used

29. Type of Child Safety Seat φ
 (0) No child safety seat
 (1) Infant seat
 (2) Toddler seat
 (3) Convertible seat
 (4) Booster seat
 (7) Other type child safety seat (specify):

(8) Unknown child safety seat type
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation φ φ
 (00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing
 (02) Forward facing
 (08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing
 (12) Forward facing
 (18) Other orientation (specify):

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing
 (22) Forward facing
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage φ φ

32. Child Safety Seat Shield Usage φ φ

33. Child Safety Seat Tether Usage φ φ

Note: Options below applicable to
 Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

(01) After market harness/shield/tether
 added, not used
 (02) After market harness/shield/tether used
 (03) Child safety seat used, but no after market
 harness/shield/tether added
 (09) Unknown if harness/shield/tether
 added or used

Designed With Harness/Shield/Tether

(11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 9

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 9

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

37. Hospital Stay 99

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

99. Case Occupant 0

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

38. Working Days Lost 99

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant 97

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM44. Automatic (Passive) Belt System Availability/ Function Ø

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use Ø

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type Ø

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System Ø

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident Ø

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**TRAUMA DATA**50. Glasgow Coma Scale (GCS) Score 9 7
(at Medical Facility)

- (00) Not injured
- (01) Injured - not treated at medical facility
- (02) No GCS Score at medical facility
- (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
- (97) Injured, details unknown
- (99) Unknown if injured

51. Was the Occupant Given Blood? 9

- (1) No - blood not given
- (2) Yes - blood given (specify units): _____
- (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 9 7

- (00) Not injured
- (01) Injured, ABGs not measured or reported
- (02-50) Code the actual value of the HCO₃
- (96) ABGs reported, HCO₃ unknown
- (97) Injured, details unknown
- (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [] YES []

UPDATE CANDIDATE?

NO [X] YES []



GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____
2. Case Number - Stratum DSI-93-AB-016
3. Vehicle Number 02

VEHICLE IDENTIFICATION

4. Vehicle Model Year 83
Code the last two digits of the model year
(99) Unknown
5. Vehicle Make (specify): 18
BUICK
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown
6. Vehicle Model (specify): 010
REGAL LIMITED
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown
7. Body Type 02
Note: Applicable codes may be found on
the back of this page.
8. Vehicle Identification Number
1G4AM47A0DHXXXXXX
Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nine's

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition 9
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown
10. Police Reported Travel Speed 999
Code to the nearest kph (NOTE: 000 means
less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown
____ mph X 1.6093 = ____ kph

11. Police Reported Alcohol Presence 0
(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) Unknown

Note: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver 96
Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: PAR

ACCIDENT RELATED

13. Speed Limit 072
(000) No statutory limit
Code posted or statutory speed limit
in kph
(999) Unknown
45 mph X 1.6093 = ____ kph
14. Attempted Avoidance Maneuver 00
(00) No impact
(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):
(99) Unknown
15. Accident Type 25
Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):
(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,500$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,500$ kgs GVWR)
- (24) Van based school bus ($\leq 4,500$ kgs GVWR)
- (25) Van based other bus ($\leq 4,500$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,500$ kgs GVWR)

- (60) Step van ($> 4,500$ kgs GVWR)
- (61) Single unit straight truck ($4,500$ kgs $<$ GVWR $\leq 8,850$ kgs)
- (62) Single unit straight truck ($8,850$ kgs $<$ GVWR $\leq 12,000$ kgs)
- (63) Single unit straight truck ($> 12,000$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

24. Rollover

- (0) No rollover (no overturning)**

Rollover (primarily about the longitudinal axis)

- (1) Rollover, 1 quarter turn only
(2) Rollover, 2 quarter turns
(3) Rollover, 3 quarter turns
(4) Rollover, 4 or more quarter turns (specify):

(5) Rollover--end-over-end (i.e., primarily about the lateral axis)

(9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

- 25. Front Override/Underride (this Vehicle)**

$$\textcircled{3.238} \text{ lbs} \times .4536 = \underline{1.472} \text{ kgs}$$

Source: [REDACTED]

- 26. Rear Override/Underride (this Vehicle)**

(0) No override/underride, or not an end-to-end impact

Override (see specific CDC)

- (1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify):

Underride (see specific CDC)

- (4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify):

(7) Medium/heavy truck or bus override

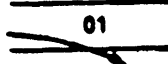




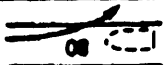
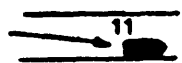

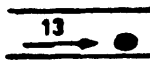
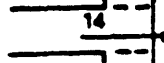

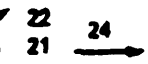
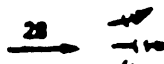
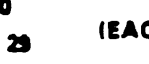
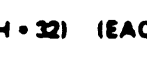




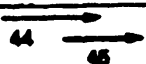
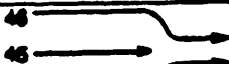

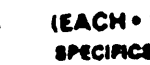






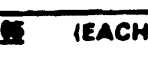
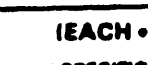
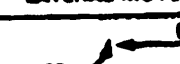

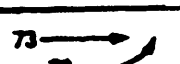

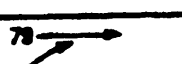
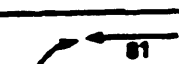
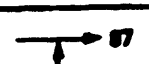



- (9) Unknown

- ### HEADING ANGLE AT IMPACT FOR HIGHEST ΔV

- Values: (000)-(359) Code actual value
(997) Noncollision
(998) Impact with object
(999) Unknown

27. Heading Angle For This Vehicle 999

28. Heading Angle For Other Vehicle 999

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 24, 25, 26, 27	 28 DECEL. 29, 30, 31	 30 (EACH • 32) SPECIFICS OTHER	 31 (EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	41 (EACH • 42) (EACH • 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 (EACH • 48) SPECIFICS OTHER	 46 (EACH • 49) SPECIFICS UNKNOWN			
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	 51 (EACH • 52) SPECIFICS OTHER	 53 (EACH • 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	61 (EACH • 62) (EACH • 63) SPECIFICS OTHER SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	 65 (EACH • 66) SPECIFICS OTHER	 67 (EACH • 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 73 (EACH • 74) (EACH • 75) SPECIFICS OTHER SPECIFICS UNKNOWN		
	K Turn Into Path	 77 TURN INTO SAME DIRECTION	 79 TURN INTO OPPOSITE DIRECTIONS	 81 (EACH • 84) (EACH • 85) SPECIFICS OTHER SPECIFICS UNKNOWN		
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 87 (EACH • 88) SPECIFICS OTHER	 89 (EACH • 89) SPECIFICS UNKNOWN			
VI Miscellaneous	M Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest) 6*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Secondary Highest

9 9 9

____ Nearest kph _____

(NOTE: 000 means less than
0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of
Delta V+
- 9 9 9

____ Nearest kph _____

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(__999) Unknown

32. Lateral Component of Delta V Secondary Highest
+
- 9 9 9

____ Nearest kph _____

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(__999) Unknown

33. Energy Absorption

9 9 9 . 9 0 0

____ Nearest 100 joules _____

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

34. Confidence In Reconstruction Program
Results (For Highest Delta V)

- (0) No reconstruction Ø
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection Ø

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

36. Is this an AOPS Vehicle? Ø

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [X] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence φ

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver φ

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver φ

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION

OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>φ</u>	41. <u>φ</u>
Depressant Drug	42. <u>φ</u>	43. <u>φ</u>
Stimulant Drug	44. <u>φ</u>	45. <u>φ</u>
Hallucinogen Drug	46. <u>φ</u>	47. <u>φ</u>
Cannabinoid Drug	48. <u>φ</u>	49. <u>φ</u>
Phencyclidine (PCP)	50. <u>φ</u>	51. <u>φ</u>
Inhalant Drug	52. <u>φ</u>	53. <u>φ</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>φ</u>	55. <u>φ</u>

Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Page 5

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Fire truck or car
 (8) Other (specify):
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type specify):
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):

(8) Non-contact rollover forces (specify):

(9) Unknown

63. Direction of Initial Roll

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
(01-30) — Vehicle Number

Noncollision

(31) Turn-over — fall-over
(33) Jackknife

Collision With Fixed Object

(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail)
(specify): _____

(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify): _____

(69) Unknown fixed object _____

Collision with Nonfixed Object

(71) Motor vehicle not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(88) Other nonfixed object (specify): _____

(89) Unknown nonfixed object _____

(98) Other event (specify): _____

(99) Unknown event or object _____

PRECRASH DATA (Continued)

65. Critical Precrash Event 5 2*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): _____

(99) Unknown _____

For Corrective Actions Attempted see variable GV14
(Attempted Avoidance Manuever)66. Precrash Stability After Avoidance Manuever φ

- (0) No avoidance manuever
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Manuever (Corrective Action) φ

- (0) No avoidance manuever
- (1) Vehicle stayed in travel lane where avoidance manuever was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance manuever was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance manuever was initiated
- (4) Vehicle departed roadway
- (5) Avoidance manuever initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

National Highway Traffic Safety
Administration

OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

OCCUPANT'S SEATING

1. Primary Sampling Unit Number

2. Case Number - Stratum

DSI-93-AB-016

3. Vehicle Number

02

4. Occupant Number

01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

Code actual height to the nearest
centimeter.

(999) Unknown

____ inches X 2.54 = ____ centimeters

8. Occupant's Weight

Code actual weight to the nearest
kilogram.

(999) Unknown

____ pounds X .4536 = ____ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front
of seat

(8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection Ø

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area Ø

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium Ø

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) Ø

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment Ø

- (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
- (0) Not entrapped
 - (1) Entrapped
 - (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 9

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 9 9

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used—type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat—type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

19. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 9

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function φ

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment φ

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? φ

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown _____

(9) Police indicated "unknown" _____

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant
at This Occupant Position9

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown

26. Seat Type (this Occupant Position)

9 9

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

(10) Box mounted seat (i.e., van type)

(99) Unknown

27. Seat Performance (this Occupant Position)

9

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model ~~φ~~ ~~φ~~ ~~φ~~

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat ~~φ~~

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation ~~φ~~ ~~φ~~

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage ~~φ~~ ~~φ~~32. Child Safety Seat Shield Usage ~~φ~~ ~~φ~~33. Child Safety Seat Tether Usage ~~φ~~ ~~φ~~Note: Options below applicable to
Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

Page 6

INJURY CONSEQUENCES

34. Injury Severity (Police Rating) φ

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 9

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 9

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay 9 9

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

99. Case Occupant φ

- (0) Not Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case

38. Working Days Lost 9 9

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death φ φ

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death φ φ41. 2nd Medically Reported Cause of Death φ φ42. 3rd Medically Reported Cause of Death φ φ

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

- (97) Other result (includes fatal ruled disease) (specify):

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 9 9

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM44. Automatic (Passive) Belt System Availability/Function ☒

- (0) Not equipped/not available
 (1) 2 point automatic belts
 (2) 3 point automatic belts
 (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
 (9) Unknown

45. Automatic (Passive) Belt System Use ☒

- (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Automatic belt in use
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):

- (3) Automatic belt use unknown
 (9) Unknown

46. Automatic (Passive) Belt System Type ☒

- (0) Not equipped/not available
 (1) Non-motorized system
 (2) Motorized system
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System ☒

- (0) Not equipped/not available/not used
 (1) Automatic belt used properly
 (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
 (4) Automatic shoulder belt worn behind back
 (5) Automatic belt worn around more than one person
 (6) Lap portion of automatic belt worn on abdomen
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):

 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident ☒

- (0) Not equipped/not available/not in use
 (1) No automatic belt failure(s)
 (2) Torn webbing (stretched webbing not included)
 (3) Broken buckle or latchplate
 (4) Upper anchorage separated
 (5) Other anchorage separated (specify):

- (6) Broken retractor
 (7) Combination of above (specify):
 (8) Other automatic belt failure (specify):

 (9) Unknown

49. Seat Orientation (this Occupant Position) ☒

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):

- (9) Unknown

Check the Primary Source Used In Determining Belt Use.

- [] Not equipped/not available/destroyed or rendered inoperative
 [] Vehicle inspection
 [] Official injury data
 [] Driver/occupant interview
 [☒] Other (specify):
V/A

- [] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO ☒

YES []

UPDATE CANDIDATE?

NO ☒

YES []

**STOP - VARIABLES 50 THROUGH 53 ARE
COMPLETED BY THE ZONE CENTER****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 9 9
(at Medical Facility)
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the
initial GCS Score recorded at medical
facility.
(97) Injured, details unknown
(99) Unknown if injured

51. Was the Occupant Given Blood? 9
(1) No - blood not given
(2) Yes - blood given
(specify units): _____
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO_3 9 9
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported, HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

53. Primary Source of Belt Use Determination 8
(0) Not equipped/not available/destroyed
or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify): VIN
(9) Unknown if belt used

National Highway Traffic Safety
Administration

OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

OCCUPANT'S SEATING

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of seat

(8) Other abnormal posture (specify):

(9) Unknown

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

Code actual height to the nearest centimeter.

(999) Unknown

___ inches X 2.54 = ___ centimeters

8. Occupant's Weight

Code actual weight to the nearest kilogram.

(999) Unknown

___ pounds X .4536 = ___ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection φ

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area φ

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium φ

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) φ

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment φ

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 9

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 99

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used—type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat—type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

19. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 9

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function Ø

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment Ø

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? Ø

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5)
for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____
- (8) Restrained, type unknown
- (9) Police indicated "unknown"

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

Page 4

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant
at This Occupant Position

9

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____
- (9) Unknown

26. Seat Type (this Occupant Position)

9 9

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position)

9

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model

(000) No child safety seat
 Applicable codes are found in your NASS CDS
 Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat

(0) No child safety seat
 (1) Infant seat
 (2) Toddler seat
 (3) Convertible seat
 (4) Booster seat
 (7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing
 (02) Forward facing
 (08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing
 (12) Forward facing
 (18) Other orientation (specify):

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing
 (22) Forward facing
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage

32. Child Safety Seat Shield Usage

33. Child Safety Seat Tether Usage

Note: Options below applicable to
 Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

(01) After market harness/shield/tether
 added, not used
 (02) After market harness/shield/tether used
 (03) Child safety seat used, but no after market
 harness/shield/tether added
 (09) Unknown if harness/shield/tether
 added or used

Designed With Harness/Shield/Tether

(11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

Page 6

INJURY CONSEQUENCES

34. Injury Severity (Police Rating) φ

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 9

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 9

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

37. Hospital Stay 9 9

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

99. Case Occupant φ

- (0) Not Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case

38. Working Days Lost 9 7

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
 - (61) 61 days or more
 - (62) Fatally injured
 - (97) Not working prior to accident
 - (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER

39. Time to Death φ φ

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
 - (96) Fatal - ruled disease
 - (99) Unknown

40. 1st Medically Reported Cause of Death φ φ41. 2nd Medically Reported Cause of Death φ φ42. 3rd Medically Reported Cause of Death φ φ

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant 9 9

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
 - (97) Injured, details unknown
 - (99) Unknown if injured

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

Page 7

AUTOMATIC BELT SYSTEM44. Automatic (Passive) Belt System Availability/Function ϕ

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use ϕ

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):

- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type ϕ

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System ϕ

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident ϕ

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):
- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):

- (9) Unknown

Check the Primary Source Used In Determining Belt Use.

- [] Not equipped/not available/destroyed or rendered inoperative
- [] Vehicle inspection
- [] Official injury data
- [] Driver/occupant interview
- [\downarrow] Other (specify): VIN
- [] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO \checkmark YES []

UPDATE CANDIDATE?

NO \checkmark YES []

STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER

TRAUMA DATA

50. Glasgow Coma Scale (GCS) Score 9 9
 (at Medical Facility)
 (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

51. Was the Occupant Given Blood? 9
 (1) No - blood not given
 (2) Yes - blood given
 (specify units): _____
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO_3 9 9
 (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO_3
 (96) ABGs reported, HCO_3 unknown
 (97) Injured, details unknown
 (99) Unknown if injured

BELT USE DETERMINATION

53. Primary Source of Belt Use Determination 8
 (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Vehicle inspection
 (2) Official injury data
 (3) Driver/occupant interview
 (8) Other (specify): V.I.N.
 (9) Unknown if belt used



CRASHPC PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Identifying Title

DSI-93-AB-016 02 _____
 Primary Case No.-Stratum Accident Event Date (Month, day, year) of Run
 Sampling Unit Sequence No.

CRASHPC Vehicle Identification

Vehicle 1 1990 LINCOLN TOWN CAR 01
 Vehicle 2 FIXED OBJECT (METAL GUARD RAIL) _____
 Year Make Model NASS Veh. No.

GENERAL INFORMATION

VEHICLE 1		VEHICLE 2	
Size	<u>4</u>	Size	<u>11</u>
Weight		Weight	
<u>1830</u> + <u>118</u> + <u>0</u> = <u>1948</u> kg		_____ + _____ + _____ = _____ kg	
Curb Occupant(s) Cargo		Curb Occupant(s) Cargo	
CDC	<u>1 2 F Z E W 1</u>	CDC	_____
PDOF (-180 to +180)	<u>0 1 0</u> °	PDOF (-180 to +180)	<u>+</u> _____ °
Stiffness	<u>5</u>	Stiffness	_____

SCENE INFORMATION

Rest and Impact Positions [] No, Go To Damage Information [] Yes

VEHICLE 1		VEHICLE 2	
Rest Position	X _____ m Y _____ m PSI _____ °	Rest Position	X _____ m Y _____ m PSI _____ °
Impact Position	X _____ m Y _____ m PSI _____ °	Impact Position	X _____ m Y _____ m PSI _____ °
Slip Angle(-180 to +180)	_____ °	Slip Angle (-180 to +180)	_____ °

VEHICLE MOTION

Sustained Contact [] No [] Yes

VEHICLE 1		VEHICLE 2	
Skidding (Rotation)	[] No [] Yes	Skidding (Rotation)	[] No [] Yes
Skidding Stop Before Rest	[] No [] Yes	Skidding Stop Before Rest	[] No [] Yes
End of Rotation Position	X _____ m Y _____ m PSI _____ °	End of Rotation Position	X _____ m Y _____ m PSI _____ °
Curved Path	[] No [] Yes	Curved Path	[] No [] Yes
Point on Path	X _____ m Y _____ m	Point on Path	X _____ m Y _____ m
Rotation Direction	[] None [] CW [] CCW	Rotation Direction	[] None [] CW [] CCW
Rotation >360°	[] No [] Yes	Rotation >360°	[] No [] Yes

National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

FRICTION INFORMATION

Coefficient of Friction . _____
 Rolling Resistance Option _____

Vehicle 1 Rolling Resistance

LF _____ RF _____
 LR _____ RR _____

Vehicle 2 Rolling Resistance

LF _____ RF _____
 LR _____ RR _____

TRAJECTORY INFORMATION

Trajectory Data [] No [] Yes

If No, Go To Damage Information

Vehicle 1 Steer Angles

LF _____ ° RF _____ °
 LR _____ ° RR _____ °

Vehicle 2 Steer Angles

LF _____ ° RF _____ °
 LR _____ ° RR _____ °

Terrain Boundary [] No [] Yes

First Point

X _____ m Y _____ m

Second Point

X _____ m Y _____ m

Secondary Coefficient of Friction . _____

DAMAGE INFORMATION

VEHICLE 1

Damage Length L 199 cm

Crush Depths C₁ _____ cm
 C₂ _____ cm
 C₃ _____ cm
 C₄ _____ cm
 C₅ _____ cm
 C₆ _____ cm

Damage Offset D \oplus 020 cm

VEHICLE 2

Damage Length L _____ cm

Crush Depths C₁ _____ cm
 C₂ _____ cm
 C₃ _____ cm
 C₄ _____ cm
 C₅ _____ cm
 C₆ _____ cm

Damage Offset D \pm _____ cm

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE *NOT IN TRANSPORT*, FILL IN THE INFORMATION BELOW.

Model Year: _____

Make: _____

Model: _____

VIN: _____

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

DSI-93-AB-016

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL(KPH)	LONG.(KPH)	LAT.(KPH)	ANG.(DEG)
	VEH #1	17.9	-17.6	-3.1	10.0
	VEH #2	.0	.0	.0	.0

ENERGY DISSIPATED BY DAMAGE VEH#1: 24178.4 JOULES VEH#2: .0 JOULES

SUMMARY OF DAMAGE DATA
VEHICLE # 1(* INDICATES DEFAULT VALUE)
VEHICLE # 2

TYPE-----CATEGORY 4
 STIFFNESS---CATEGORY 5
 WEIGHT----- 1948.0 KGS
 CDC-----12FZEW1
 L----- 199.0 CM.
 C1----- .0 CM. *
 C2----- .0 CM. *
 C3----- .0 CM. *
 C4----- .0 CM. *
 C5----- .0 CM. *
 C6----- .0 CM. *
 D----- 20.0 CM.
 RHO----- 1.00 *
 ANG----- 10.0 DEG.
 D'----- 45.8 CM.

TYPE-----CATEGORY 11
 STIFFNESS---CATEGORY 0
 WEIGHT----- 999999.9 KGS *
 CDC-----BARRIER
 L----- .0 CM. *
 C1----- .0 CM. *
 C2----- .0 CM. *
 C3----- .0 CM. *
 C4----- .0 CM. *
 C5----- .0 CM. *
 C6----- .0 CM. *
 D----- .0 CM. *
 RHO----- 1.00 *
 ANG----- .0 DEG. *
 D'----- .0 CM.

DIMENSIONS AND INERTIAL PROPERTIES

A1 = 138.9 CM.
 B1 = 150.4 CM.
 TR1 = 157.0 CM.
 I1 = 471946.6 NEWT-SEC**2-CM
 M1 = 19.554 NEWT-SEC**2/CM
 XF1 = 251.0 CM.
 XR1 = -289.6 CM.
 YS1 = 97.8 CM.

A2 = 127.0 CM.
 B2 = 127.0 CM.
 TR2 = 127.0 CM.
 I2 = ***** NEWT-SEC**2-CM
 M2 = ***** NEWT-SEC**2/CM
 XF2 = 127.0 CM.
 XR2 = -127.0 CM.
 YS2 = 127.0 CM.

SUMMARY OF CRASHEPC RESULTS (USING SPINOUT)

DSI-93-AB-016

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL(MPH)	LONG.(MPH)	LAT.(MPH)	ANG.(DEG)
	VEH #1	11.1	-10.9	-1.9	10.0
	VEH #2	.0	.0	.0	.0

ENERGY DISSIPATED BY DAMAGE VEH#1: 17830.7 FT-LB. VEH#2: .0 FT-LB.

SUMMARY OF DAMAGE DATA
VEHICLE # 1(* INDICATES DEFAULT VALUE)
VEHICLE # 2

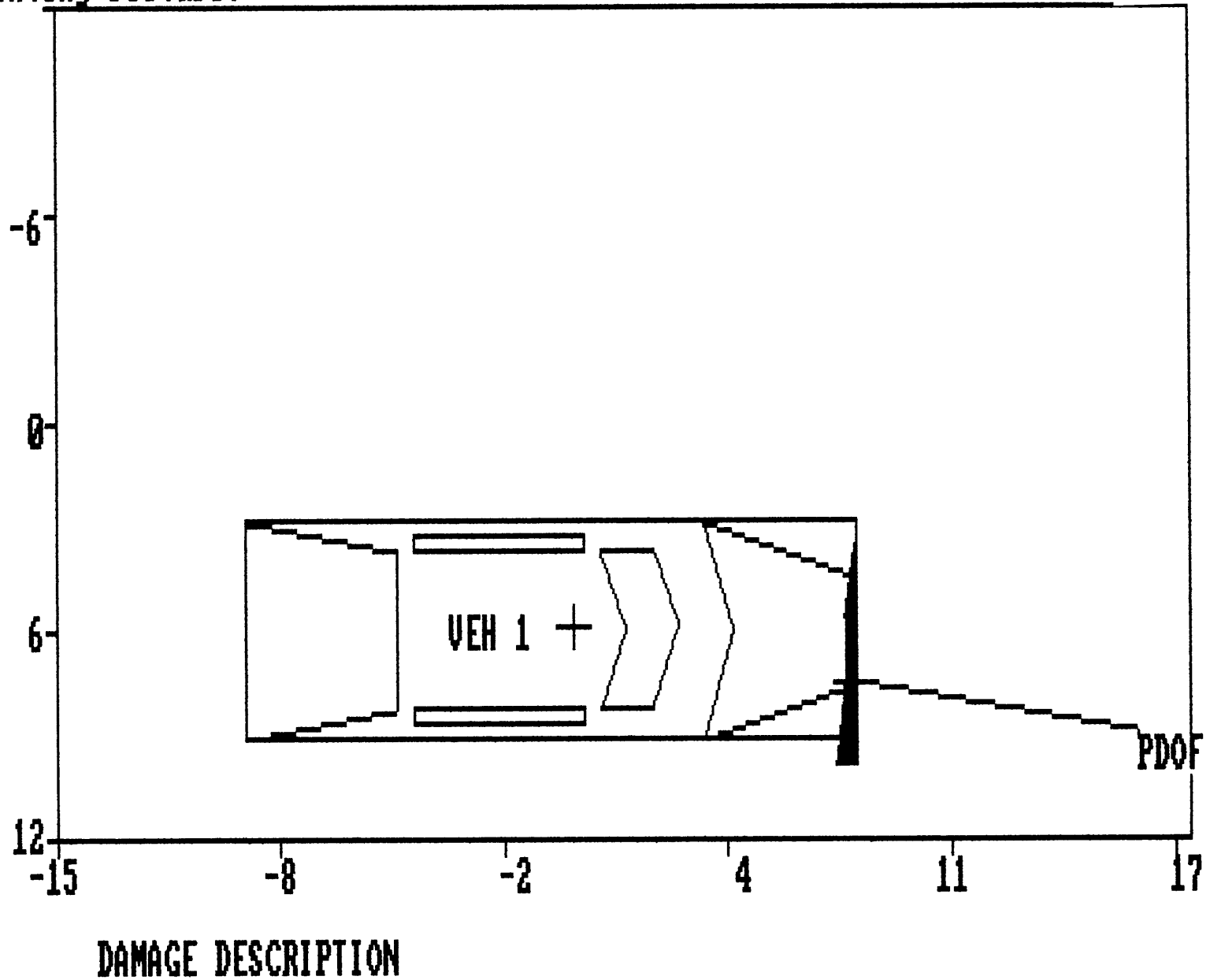
TYPE-----CATEGORY 4
 STIFFNESS---CATEGORY 5
 WEIGHT----- 4294.5 LBS.
 CDC-----12FZEW1
 L----- 78.3 IN.
 C1----- .0 IN. *
 C2----- .0 IN. *
 C3----- .0 IN. *
 C4----- .0 IN. *
 C5----- .0 IN. *
 C6----- .0 IN. *
 D----- 7.9 IN.
 RHO----- 1.00 *
 ANG----- 10.0 DEG.
 D'----- 18.0 IN.

TYPE-----CATEGORY 11
 STIFFNESS---CATEGORY 0
 WEIGHT-----2204586.0 LBS. *
 CDC-----BARRIER
 L----- .0 IN. *
 C1----- .0 IN. *
 C2----- .0 IN. *
 C3----- .0 IN. *
 C4----- .0 IN. *
 C5----- .0 IN. *
 C6----- .0 IN. *
 D----- .0 IN. *
 RHO----- 1.00 *
 ANG----- .0 DEG. *
 D'----- .0 IN.

DIMENSIONS AND INERTIAL PROPERTIES

A1 = 54.7 IN.
 B1 = 59.2 IN.
 TR1 = 61.8 IN.
 I1 = 41772.9 LB-SEC**2-IN
 M1 = 11.166 LB-SEC**2/IN
 XF1 = 98.8 IN.
 XR1 = -114.0 IN.
 YS1 = 38.5 IN.

A2 = 50.0 IN.
 B2 = 50.0 IN.
 TR2 = 50.0 IN.
 I2 = 5732151000.0 LB-SEC**2-IN
 M2 = 5732.151 LB-SEC**2/IN
 XF2 = 50.0 IN.
 XR2 = -50.0 IN.
 YS2 = 50.0 IN.



AIRBAG SUPPLEMENT

1

ACCIDENT SUMMARY

1. Accident Date: *WINTER / WEEKDAY*
2. Police Investigated 1
- (1) Yes
(2) No
(3) Unknown
- Agency:
City:
County: *NEW JERSEY*
3. General Locality 1
- (1) Freeway, Limited Access
(2) Urban (City)
(3) Urban-Rural (mixed)
(4) Rural, Fields
4. Configuration (First Harm) 1
- (0) Struck Object or Ped
(1) Rear-End
(2) Head-On
(3) Rear-to-Rear
(4) Angle
(5) Sideswipe-Same Direction
(6) Sideswipe-Opposite Dir.
(7) Noncollision
(8) Nonimpact Deployment
(9) Unknown
5. Fire Involved 0
- (0) None
(1) Airbag Vehicle
(2) Other Vehicle
(3) Both Vehicles
(9) Unknown
6. Vehicles Involved 2
7. Persons Involved 4
8. Injured Persons 2

9. Maximum AIS in Accident 3

AIRBAG VEHICLE INSPECTION

10. Date Vehicle Inspected: *1993*
11. Reason Vehicle Note Inspected 1
- (0) Not Required
(1) Inspection Completed
(2) Cannot be Located
(3) Repaired or Destroyed
(5) Refusal or Impounded
(7) Other:
12. Impact Data Obtained 1
- (0) No Data Obtained
(1) CDC Only
(2) Crush Profile Only
(3) Trajectory Data Only
(4) CDC and Crush Profile
(5) CDC and Trajectory
(6) Crush and Trajectory
(7) CDC, Crush, and Trajectory
13. Basis of Delta-V 1
- (0) Not Computed (Unknown why)
(1) CRASH - Damage Only
(2) CRASH - Damage + Traj
(3) OLDMISS
(4) POLES
(5) Unknown Basis
(6) One Vehicle Beyond Scope
(7) Collision Beyond Scope
(8) Insufficient Data

VEHICLE HISTORY

14. Prior Impacts for AB Vehicle? 2
- (1) Yes
(2) No
(9) Unknown
15. Prior AB Maintenance or Service 2
- (1) Yes, (2) No, (9) Unknown

Describe:

AIRBAG SUPPLEMENT

AIRBAG VEHICLE

Fleet: **NONE**
 VIN: **1LNLM82F54Y - - - - -**
 Mileage: **EST. 19,312 KM (12,000 mi)**

SYSTEM READINESS LAMP

- | | |
|---|--|
| <p>16. Pre-Impact Lamp Condition <input type="checkbox"/> 1
 (1) Functioning/Proved Out
 (2) Inoperative
 (9) Unknown</p> <p>17. Driver's Report of Pre-Impact Flashing <input type="checkbox"/> 00
 (00) No Flashing Reported
 (01) Continuous Flashing
 (02) _____
 Number of Flashes: _____
 (11)
 (12) Constant Light
 (19) Flashing, Unknown Number
 (88) Not Applicable, System Removed
 (99) Unknown</p> <p>18. Period of Pre-Impact Flashing <input type="checkbox"/> 0
 (0) No Flashing
 (1) Same Day as Impact
 (2) Prior Day
 (3) Prior Two Days
 (4) Prior Week
 (5) Prior Month
 (6) Over One Month
 (9) Unknown</p> <p>19. Post-Impact Lamp Condition <input type="checkbox"/> 9
 (1) Functioning/Proved Out
 (2) Inoperative
 (9) Unknown</p> <p>20. Post-Impact Flashing <input type="checkbox"/> 00
 (00) No Flashing Reported
 (01) Continuous Flashing
 (02) _____
 Number of Flashes: _____
 (11)
 (12) Constant Light
 (19) Flashing, Unknown Number
 (88) Not Applicable, System Removed
 (99) Unknown</p> | <p>21. Airbag Vehicle First Harmful Event <input type="checkbox"/> 13
 (01) Fire or explosion
 (02) Immersion
 (03) Gas Inhalation
 (04) Fell from vehicle
 (05) Injured in vehicle
 (06) Other noncollision (specify):
 (07) Overturn
 (08) Jackknife
 COLLISION WITH:
 (09) Pedestrian
 (10) Pedalcyclist
 (11) Railway train
 (12) Animal
 (13) Motor vehicle in transport
 (same roadway)
 (14) Motor vehicle in transport
 (other roadway)
 (15) Parked motor vehicle
 (16) Other type nonmotorist (specify):
 (17) Thrown or falling object
 (18) Boulder
 COLLISION WITH FIXED OBJECT
 (20) Building
 (21) Impact attenuator/crash cushion
 (22) Bridge pier or abutment
 (23) Bridge parapet end
 (24) Bridge rail
 (25) Guardrail
 (26) Concrete traffic barrier
 (27) Median barrier
 (28) Other longitudinal barrier (specify):
 (29) Highway/traffic sign post
 (30) Overhead sign support
 (31) Luminaire/light support
 (32) Utility pole
 (33) Other post, pole, or support
 (34) Culvert
 (35) Curb
 (36) Ditch
 (37) Embankment-earth
 (38) Embankment-rock, stone, or concrete
 (39) Fence
 (40) Wall
 (41) Fire hydrant
 (42) Shrubbery
 (43) Tree
 (44) Other fixed object (specify):
 (45) Pavement surface irregularity
 (99) Unknown</p> |
|---|--|

AIRBAG SUPPLEMENT

3

AIRBAG VEHICLE IMPACT SUMMARY

22. Vehicle Role 1
- (0) Noncollision
(1) Striking unit
(2) Struck unit
(3) Both striking and struck
(9) Unknown
23. Manner of Leaving Scene 2
- (1) Driven
(2) Towed-due to damage
(3) Towed-not for damage
(4) Towed-details unknown
(5) Abandoned
(9) Unknown
24. Number of Impact Events 2
- (8) 8 or more
(9) Unknown
25. Rollover ϕ
- (0) No rollover
(1) First event
(2) Subsequent event
(3) Yes, Unknown event
(9) Unknown
26. Override/Underride ϕ
- (0) No override/underride
(1) Override - 1st CDC
(2) Override - Other CDC
(3) Underride - 1st CDC
(4) Underride - Other CDC
(9) Unknown

AIRBAG VEHICLE DAMAGE

CODES: (1) Yes, (2) No, (9) Unknown

27. Left Front Fender Damage 2
28. Right Front Fender Damage 1
29. Center Top of Grille Damage 2

FRONT BUMPER E.A. STATUS

30. Left 5
31. Right 5
- (1) Normal
(2) Extended
(3) Partial Compression
(4) Complete Compression
(5) Not Applicable
(9) Unknown

FIRST AIRBAG VEHICLE IMPACT:

32. Configuration 1
- (0) Struck Object or Ped
(1) Rear-End
(2) Head-On
(3) Rear-to-Rear
(4) Angle
(5) Sideswipe-Same Direction
(6) Sideswipe-Opposite Dir.
(7) Noncollision
(8) Nonimpact Deployment
(9) Unknown
33. CDC: 12FZEW1
34. Object Contacted: 1983 Buick REGAL

PRIMARY/DEPLOYMENT IMPACT:

35. Event Number 1
36. Total Delta-V UNK
37. Longitudinal Delta-V UNK
38. Configuration 1
- See 32 above for codes
39. CDC: 12FZEW1
40. Object Contacted: 1983 Buick REGAL

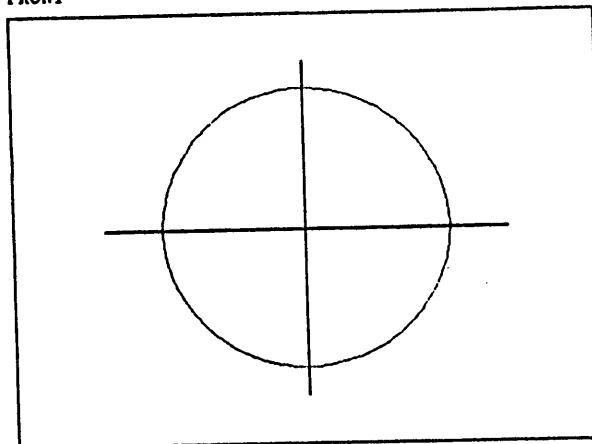
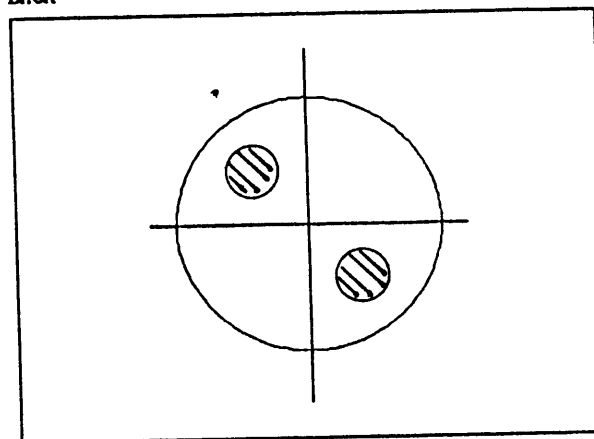
AIRBAG SUPPLEMENT**AIRBAG SYSTEM DAMAGE**

CODES: (1) Yes, Damaged
 (2) No, Intact
 (3) Not Applicable
 (9) Unknown

- | | |
|---|----------------------------|
| 41. Airbag Module | <input type="checkbox"/> 2 |
| 42. Left Front Sensor | <input type="checkbox"/> 2 |
| 43. Center Front Sensor | <input type="checkbox"/> 2 |
| 44. Right Front Sensor | <input type="checkbox"/> 2 |
| 45. Rear Cowl Sensor | <input type="checkbox"/> 5 |
| 46. Diagnostic Module | <input type="checkbox"/> 2 |
| 47. Wiring | <input type="checkbox"/> 2 |
| 48. Knee Diverter | <input type="checkbox"/> 5 |
| 49. Indication of disconnected
or loose electrical
connectors | <input type="checkbox"/> 2 |
| 50. Condition of Deployed Bag | <input type="checkbox"/> 1 |
- (1) Bag intact
 (2) Split or torn
 (3) Cut by object in impact
 (4) Cut after accident
 (5) Other
 (8) NA (not deployed)
 (9) Unknown

DESCRIBE SYSTEM AND BAG DAMAGE:

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS
 BELOW:

FRONT**BACK**

AIRBAG SUPPLEMENT

5

OCCUPANTS OF AIRBAG CAR

51. Number of Occupants in Vehicle 2
52. Number of Injured Persons 2
53. Maximum AIS in Airbag Vehicle 3
- (0) No Injury
- (1-6) AIS Severity
- (7) Injured, unknown severity
- (9) Unknown

DRIVER

Age: 61

Sex: FEMALE

54. Number of Driver Injuries 5

55. Source of Best Injury Data 2
- (0) Not injured
- (1) Autopsy
- (2) Hospital Medical Records
- (3) Emergency Room only
- (4) Private physician, clinic
- (5) Lay Coroner Report
- (6) EMS Personnel
- (7) Interviewee
- (8) Police
- (9) Unknown

MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
Head/Neck/Face	<u>3</u>	<u>93</u>
Chest	_____	_____
Abdomen	_____	_____
Legs/Hips	_____	_____
Other (Arms)	<u>1</u>	<u>93</u>
Driver Maximum	<u>3</u>	<u>93</u>

EJECTION

Extent: NONE

Portal: NONE

OTHER VEHICLE:

Maximum AIS

NO INJURIES

Prime/Deploy Impact w AB Vehicle

Event Number

01

CDC: N/A (NOT INSPECTED)

Total Delta V

N/A

Make: BUICK

Model Year: 1983

Model: REGAL

Body Type: 2-DOOR

NOTES:

AIRBAG SUPPLEMENT

6

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown 1

Evidence: INTERVIEW

DRIVER POSTURE: Any comments Recorded (1) Yes, (2) No 1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs, and feet. Also note hand and arm position. Did driver brace before crash? Describe:

THE DRIVER WAS SEATING IN A UPRIGHT POSITION - THE SEAT POSITION WAS FORWARD OF CENTER BECAUSE OF THE DRIVER'S HEIGHT.

DRIVER FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No 1

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

THE DRIVER WAS WEARING EYGLASSES AT THE TIME OF THE COLLISION.
THE LENSES ON THE RIGHT BROKEN OUT FROM IMPACT WITH THE AIRBAG (SRS)

DRIVER COMMENTS: Comments Recorded (1) Yes, (2) No 1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

THE DRIVER SMELL CHEMICAL ORDER AND SEEN SMOKE

PASSENGER-AIRBAG CONTACT: (1) Yes, (2) No, (9) Unknown 2

Describe:

39 CASE NO.		40 STATION		INITIAL ACCIDENT INVESTIGATION REPORT				41 REPORTABLE <input checked="" type="checkbox"/> NON-REPORTABLE <input type="checkbox"/>	
42 DATE OF COLLISION		43 DAY OF COLLISION		44 TIME	45 NO OF VEHICLES	46 NO KILLED	47 NO INJURED	48 COUNTY	
MONTH	DAY	YEAR	S	M	T	W	T	F	S
49 MUNICIPALITY		50 MILEPOST		51 DIRECTION		52 SERVICE AREA, RAMP, TOLL PLAZA, OR COMMUTER LOT			
VEH 1		53 POLICY NO.		54 INS. CODE		VEH 2		79 POLICY NO.	
PARKED VEHICLE		PEDESTRIAN		PEDALCYCLIST		PARKED VEHICLE		PEDESTRIAN	
55 DRIVER'S FIRST NAME		INITIAL		LAST NAME		81 DRIVER'S FIRST NAME		INITIAL	
56 NUMBER AND STREET		82 NUMBER AND STREET		83 CITY		STATE		ZIP	
57 CITY		STATE		ZIP		EXPIRES		85 STATE	
58 DRIVER'S LICENSE NUMBER		59 STATE		60 D.O.B.		61 EYES		62 SEX	
63 OWNER'S FIRST NAME		INITIAL		LAST NAME		84 DRIVER'S LICENSE NUMBER		85 STATE	
64 NUMBER AND STREET		86 D.O.B.		87 EYES		88 SEX		89 SEX	
65 CITY		STATE		ZIP		EXPIRES		91 CITY	
66 MAKE AND MODEL		COLOR		67 YEAR		68 PLATE NO.		69 STATE	
70 VIN NUMBER		71 BODY TYPE		92 MAKE AND MODEL		COLOR		93 YEAR	
72 VEHICLE REMOVED TO		73 AUTHORITY		94 PLATE NO.		95 STATE		96 VIN NUMBER	
74 TRAILER OWNER'S FIRST NAME		INITIAL		LAST NAME		97 BODY TYPE		98 VEHICLE REMOVED TO	
75 NUMBER AND STREET		CITY		STATE		ZIP		99 AUTHORITY	
76 MAKE		77 PLATE NO.		78 STATE		EXPIRES		100 TRAILER OWNER'S FIRST NAME	
79 MAKE		80 PLATE NO.		81 STATE		EXPIRES		101 NUMBER AND STREET	
105 INITIAL IMPACT		106 AREAS DAMAGED		107 SPEED POSTED		108 TIRE MARKS		109 ALCOHOL DATA	
110 PARKWAY DAMAGE		111 RAN OFF ROAD		112 TRAFFIC VOLUME		113 HAZARDOUS MATERIALS		114 NO. OF LANES	
115 SERVICE TICKET		116 CHARGE		117 CHARGE		118 TROOPER'S SIGNATURE		119 BADGE NO.	
120 STATION		121 TROOP		122 STATUS		123 NAMES, ADDRESSES OF OCCUPANTS IF DECEASED, DATE & TIME OF DEATH		124	

Case No.

BEST AVAILABLE COPY

M.D.
EYE CARE

CONFIDENTIAL

Dear

Mrs. states that on during the activation of her air bag in the car in which she was driving, a chemical was emitted from the air bag that burned her face. She was taken to Hospital in 1 where her face and eyes were irrigated, and her face and eyes were bandaged. She was in severe pain but was not admitted to the hospital.

I first saw Mrs. on at which time there were extensive burns to the entire face along with a large corneal abrasion of the right eye. There was marked periorbital, nasal, and other facial swelling. She was in severe pain. I subsequently treated Mrs. on

She is also under the care of Doctor a plastic surgeon.

Mrs. ophthalmic injuries consist of the following:

- 1) Extensive corneal abrasion of the right eye with repeated attacks of recurrent corneal erosion (breakdown of the abraded area.) These attacks usually last two to three days. The symptoms during these breakdowns consist of severe pain in the eye and periorbital area, blurred vision, and an inability to drive and otherwise function. The last such attack began on
- 2) Blurred vision in the right eye since the injury to the cornea.
- 3) Photophobia (light sensitivity) since the injury.
- 4) Chemical burns of the lids of both eyes which have resulted in lid soreness, lid discoloration, lid scarring, lid swelling, paresthesias (altered sensation such as "skin pricking" and "numbness") and lid pain. The patient has difficulty touching the lids and applying cosmetics.

M.D.

EYE CARE.

- 5) "Soreness" of the orbits, and periocular tissues.
- 6) Intermittent swelling of the periorbital tissues.
- 7) Area between the orbits and over the nose is discolored, painful, and scarred.
- 8) Area in and above the eyebrows is discolored, painful, and scarred.
- 9) Area below the orbits is discolored, painful, and scarred.
- 10) Abrupt vitreous (gel of the eye) retractions with intermittent attacks of "flashes of light" which disturb the vision.

Mrs. injuries are due to the facial trauma that she sustained on as they are consistent with the nature of the trauma that she sustained. The damage and symptoms that I have listed could be longstanding or permanent.

Sincerely yours,

M.D.

M.D.
M.D.
M.D.
M.D.

Re:
D/A:

Dear

was initially seen in our office on
According to the patient, she was apparently involved in a motor vehicle accident in which her car hit a metal rail. When her air bag deployed, it apparently ruptured and she sustained facial burns of her forehead, cheeks, eyelids and chin. She was seen by Dr. for the eye care and was referred to our office for the rest of the injuries.

The dressings that were in place were removed. The areas were cleaned and the crusts were removed on . She was given instructions at that point to use Silvadene with telfa pads on the cheeks and chin, and just the Silvadene on the forehead. She was also to use cold compresses.

The patient was next seen on . At this point, there was significant improvement. The chemical burns were healing well. She was to continue her treatment with Silvadene on the left cheek and put Bacitracin only on the forehead and the right cheek.

The patient stated that her nose was very swollen and tender. There seemed to be some tenderness in the area of the right upper lateral cartilage. She was not sure whether she may have broken this at the time of the injury. She had a rather considerable amount of bruising in her neck area, which was felt to have come from the facial area.

Re:

- page 2

By _____, she was approximately 12 days since the chemical burns of her face and the areas were essentially healed. The areas were red. She was told to stop the Bacitracin and to start using sunscreen.

By _____, the patient was approximately 6 weeks following the injury. The forehead and right cheek still had a very slight pinkish color. The left cheek had a more significant redness and there was a small area of hypertrophic scar tissue in the mid portion of her cheek. She was instructed in massaging the area. She also described some funny feeling around her nose and upper lip area.

According to the patient, x-rays which were taken were normal and there were no fractures.

The patient was next seen on _____, approximately 2 1/2 months following her injury. She still had complaints of numbness in her upper lip and around the nasal tip area. She had complaints of pain and itching of her upper lids. The upper lids still had some swelling and redness. The forehead and right cheek were red. The left cheek was also red and still had some hypertrophic scarring. She was fitted with a silicone patch to use on the left cheek to try to help reduce the hypertrophic scarring.

By _____ the left cheek was looking somewhat better and some of the redness and scar tissue had decreased. The patient complained of the same weird feelings and prickly sensations over her forehead, the nose, the upper lip and her eyelids. I could not be certain as to what was the source of this. I felt it might be related to the dryness of the area, or possibly the chemical propellant used in the air bag that caused the injury.

When Ms. _____ was seen on _____ she was coming along somewhat better. The lumpy scars that were present on the left cheek were flattened considerably with the use of the silicone gel pad. She still had a considerable amount of redness in the middle part of her face, on the cheeks, the middle half of her forehead, nose and chin area. The lateral cheeks, forehead and parts of the nose were paler. Additionally, she still had the prickly numb feeling periodically over her face.

Ms. _____ was next seen on _____, because Dr. _____ who she had seen suggested that she come back sooner than her scheduled appointment. Her complaints were essentially the same and I suggested that she use some cortisone cream, if necessary, to try to alleviate some of the discomfort and also some ice, if necessary.

Re:

- page 3

By the patient was 10 1/2 months since the injury. The areas of the mid forehead, nose and cheeks still had a very pinkish/red quality, which continued to persist. She still had the itching and burning feeling occasionally. She was concerned because the findings had persisted for quite a period of time. I told her at this point I could not be sure how long this would last, or if it would, in fact, totally go away since we were dealing with a chemical burn, not a thermal type of injury. Possibly what would happen would be dependent more on the behavior of the chemical agent, rather than the normal experience with a thermal type of burn.

When Ms. was last seen, as mentioned, she was 10 1/2 months from the accident and the acute injuries had subsided. She still had these persistent problems of redness and irritation, which presents itself in different ways, as mentioned in my notes.

The hypertrophic scarring that was present on the left cheek appeared to have subsided and I do not believe anything further needs to be done regarding this matter.

I will be following Ms. for another 6 to 8 months. Hopefully, by that time we will see a significant improvement. If the redness and irritation continue, then it may represent a permanent finding. At this point I have no plans to perform any surgical treatment, but should the problems persist, we might want to try some mild superficial treatments to the face to see if we can try to alleviate some of her symptoms and reduce the redness.

Sincerely,

M.D.

DIVISION OF DIAGNOSTIC IMAGING

F '31

Dr.:

Loc: ✓

Hospital #: 7

X-ray #:

Case #:

Exam Date: [REDACTED]

Date Printed: [REDACTED]

Date Initially Printed:
STERNUM

The visualized bony outlines of the sternum and adjacent structures appear to be within normal limits. No evidence of radiographic abnormality is noted.

IMPRESSION: Normal study of the sternum.

[REDACTED]
M.D.

DIVISION OF DIAGNOSTIC IMAGING

F '31

Dr.:
Loc:
Hospital #:
X-ray #:

Case #:

Exam Date: [REDACTED]

Date Printed: [REDACTED]

Date

Initially Printed:

RIGHT WRIST: AP, lateral and oblique.

There is no evidence of fracture or dislocation.

IMPRESSION: No evidence of fracture or dislocation.

I

M.D.

DIVISION OF DIAGNOSTIC IMAGING

F '31

Dr.:
Loc:
Hospital #
X-ray #:

Case #: ---

Exam Date: [REDACTED]

Date Printed: [REDACTED]

Date Initially Printed:
CHEST: AP, erect

There is no evidence of inflammatory disease, mass density, atelectasis, cardiomegaly or congestive failure.

IMPRESSION: No evidence of active pulmonary disease.

LEFT RIBS:

Bony outlines of the ribs demonstrate no evidence of fractures or other significant radiographic abnormality. No fracture of the ribs is noted.

IMPRESSION: Normal study of the left ribs. No evidence of rib fracture.

[REDACTED]
M.D.

DIVISION OF DIAGNOSTIC IMAGING

F '31

Dr.:
Loc:
Hospital #:
X-ray #:

Case #:

Exam Date:

Date Printed:

Date Initially Printed:

FACIAL BONES, RIGHT ORBIT, LEFT ORBIT :

The visualized facial bones are unremarkable. There is no evidence of significant abnormality. Bony structures and orbital contents, as visualized, appear to be within normal limits.

IMPRESSION: Normal study of the facial bones. Normal orbits.


M.D.

NAME
CLAS OUT
ACCT
AGE 061 Y
SEX F

D/A
LOC ER
TYPE OP
MR#
DOB
PHY

+++++ LEGEND +++++
X=REQUEST @=PICKED-UP ?=PENDING L=LO H=HI #=DELTA *=NEW [...] =OLD-VALUE r=REPEA

===== CBC & DIFFERENTIALS =====

STAT:

TEST REFERENCE
RANGE

WBC	3.3-11.0 thous	13.45 H
RBC	3.9-5.0 mills	4.46 -
HGB	11.6-15.6 gm%	14.4
HCT	37.0-47.0 %	43.1
MCV	79-99	96.7
MCH	26.0-32.6	32.3
MCHC	31.0-36.0	33.4
PLTS	130-400 thou	281

NEUT	44-88 %	78.4
LYMP	12-43 %	14.4
MONO	2-11 %	4.8
EOS	0-5 %	1
BASO	0-2 %	.4
LUC	0.0-5.0 %	1

===== URINALYSIS =====

STAT:

TEST REFERENCE
RANGE

PH	5.0-7.5	6.0
PROTEIN	-NEG	TRACE H
GLUCOSE UR	-NEG	NEG
KETONE	-NEG	1+ H
BILE	-NEG	NEG
OCC.BLOOD	-NEG	NEG
COLOR	-YELLOW	YELLOW
CLARITY	-CLEAR	CLEAR
SP.GRAV	1.010-1.035	1.016
WBC/HPF	0-5	5-9

(CONT.)

===== URINALYSIS =====

STAT:

TEST	REFERENCE RANGE	
RBC/HPF	0-2	1-4
EPITH.	-0	5-9 H
BACTER	-0	1+ H
COMMENT	-NEG	SEE BELOW
UROBIL	-NEG	NEG

ID : TEST : COMMENT
PDAT : PTIM :
UROTHELIAL CELLS: 0-2 H

===== SUMMARY LOG =====

ID *LOG

PICKUP
DATE TIME

UNITS
~~XXXXXXXXXX~~
~~XXXXXXXXXX~~